X

PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

PROVINCE OF ASSAM

FOR THE YEAR

1887-88.

BY

GUSTAV MANN, Esq.,

CONSERVATOR OF FORESTS, ASSAM.

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FROM GUSTAV MANN, ESQ.,
Conservator of Forests, Assam,

TO THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Dated Shillong, the 30th June 1888.

SIR,

I HAVE the honour to submit the Annual Forest Administration Report for the year 1887-88.

I have the honour to be,

SIR,

Your most obedient Servant,

GUSTAV MANN,

Conservator of Forests, Assam.

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BENGAL SECRETARIAT LIBRARY

INTRODUCTION.

The year 1887-88 has been altogether a very successful one in Forest Administration in Assam.

2. The area of reserved forests gazetted under the Forest Act was increased by 603 square miles. The area proposed under Section IV. of the Forest Act during this and previous years, but not finally gazetted before its close, is 230 square miles, and preliminary enquiries and surveys regarding forty miles more were instituted with a view of having them also reserved.

3. Survey work was continued in the Gáro Hills, in the Songsak and Rongrengiri Sál forests, and good progress made, considering the difficulties there are to contend with. Valuation surveys were completed in the Darugiri forest, and other information collected for preparing a working plan.

4. The maintenance of all the demarcated boundaries has received careful attention and personal supervision from the Divisional Officers. The general protection has been ensured by strict control over the patrolling done by forest guards.

5. Fire protection has been even more successful than in the previous year, although the season was a most unfavourable one. The area successfully protected has been larger, and the cost less than in the previous year.

6. Revenue control has also received the closest attention, and been rewarded by exceptionally good results.

7. The number of prosecutions, although more than in the previous year, continues to be very insignificant, as compared with the enormous area under protection.

8. Although plantations were not extended, because very strict economy had to be continued until the recovery of the timber trade in Lower Assam was quite ensured, still all existing plantations have received the greatest care, as heretofore, and are all that could be desired.

9. The expenditure on roads and buildings has for the same reason been somewhat restricted, but all existing ones were kept in good repair and state of efficiency.

10. There has been a large increase again in the outturn of the forests, particularly in that of the Sál forests in Lower Assam, showing that the export trade in this timber has been quite re-established.

11. Instead of a deficit on the working of the department, as there has been during the last three years, there was a surplus of Rs. 40,420 attained on the year's transactions.

CHAPTER I.—AREA AND BOUNDARIES.

Area of reserved forests

12. The area of Government reserved forests in the Province of Assam added during the year under report was 613 square miles, as shown in the following statement:—

Name of district.	Name of mauza or other sub-division.	Name of forest.	Area.
Gáro Hills	Mauza No. 1	Angaratali	9,138
Goálpára	Ripnduár	Sankos	28,800
Ditto	Ditto	Muktaigaon	3,200
Nowgong	Mahál Datipur, Duár Amli Parbat.	Second addition to the Kholahát reserve.	14,970
Ditto	Duár Kattiatoli	Addition to the Doboka reserve	28,494
Nága Hills	Barpathar mauza	Kaliani	51,840
Ditto	Ditto	Diphu	42,080
Ditto	Ditto	Rengma	34,400
Lakhimpur	Jokai and Kotoha mauza	Jokai	11,858
Ditto	Bhorolwa mauza	Bhorolwa	5,280
Ditto	Kadom ,,	Kadom	13,626
Ditto	Chapatoli, Powai, and Makum mauzas.	Upper Dehing	148,691

The area deducted on account of re-surveys during the year was 7,439 acres, leaving a net increase of 385,679 acres, or 603 square miles.

13. The boundaries of the different reserves gazetted during the year and the privileges granted have been recorded in the register of reserves, copy of which forms Appendix I. of this report.

14. Further details regarding the changes in the area of reserved forests are shown in Statement No. 49 of this report.

15. The percentage of the reserved forests to the total area in the different districts at the end of the year under report was as follows:—

Name of district.	Total area in square miles.	Area of reserves in square miles.	Percentage of area of reserves to total area.
Gáro Hills	3,653	133	3·60
Goálpára	3,897	625	16 03
Kámrúp	3,631	128	3·52
Darrang	3,418	294	8·60
Nowgong	3,417	111	3·24
Sibságar	2,855	65	2·27
Lakhimpur	11,500	302	2·62
Cachar	3,750	745	19·84
Sylhet	5,440	170	3·12
Khási and Jaintia Hills	2,160	50	2·31
Nága Hills	6,400	687	10·73

Area of proposed reserves under settlement.

16. The state of the forest settlements for the whole Province at the close of the year is shown in the following table. It will be seen that only six of the proposed reserves remained under settlement, as compared with 14 at the close of the previous year, and one of these has already been finally gazetted under Section 19 of the Forest Act since the close of the year. The settlement of part of No. 1, the Parapara forest, has been given up, and an area about

half as large again as the former, but at a greater distance from villages, so as not to interfere with the extension of cultivation, has been proposed in its stead. :—

Number.	Name of forest.	Area in acres.	Name of district.	Year when proposed by Conservator.	Year when gazetted under Section 4 of the Indian Forest Act.	Reason for non-settlement during the year 1887-88.
1	Parapara	18,016	Lakhimpur	1884-85	1884-85	Submission of revised proposals.
2	Jaipur	25,920	Ditto	"	"	A further reference by the Forest Settlement Officer to the Chief Commissioner.
3	Dayang.....	60,875	Sibságar	1885-86	1885-86	Conservator's appeal against the decision of Forest Settlement Officer.
4	Second addition to the Charduar reserve.	32,000	Darrang	"	1886-87	Complications about boundaries of adjoining private lands.
5	Makum.....	2,649	Lakhimpur	1886-87	"	Assam Railways and Trading Company's appeal to the Government of India.
6	Duar Jangthung.	8,047	Nowgong	1887-88	1887-88	Forest Settlement Officer's time was taken up by other duties.

17. All the proposed reserves under settlement have been demarcated by posts and mounds and the clearing of lines where no natural boundaries existed.

Area of protected forests

18. No addition was made during the year to the protected forests, but application has been made for the appointment of a Forest Settlement Officer to enquire into the rights of private persons in the protected forests of the Sylhet district.

19. In the Lakhimpur district 179,455 acres, or 280 square miles, of the protected forests have been gazetted as reserves, and in the whole Province 4,303 acres, or 7 square miles, of the protected forests have been given up for permanent cultivation.

Area of unclassed forests and waste lands.

20. The area of the unclassed State forests and waste lands has been reduced by 217,819 acres, or 340 square miles. Of this 213,623 acres, or 334 square miles, were gazetted as reserved forests, and the rest, 4,196 acres, or 7 square miles, was given up for permanent cultivation.

Compensation paid on account of forest settlement.

21. In the Gáro Hills district several villages existed in the new Bagmara and Angaratali reserves, one Nága village in the Desai reserve in the Sibságar district, and a Doania village in the Upper Dehing reserve, the removal of which to other lands was considered necessary to ensure the safety of these forests, since Gáros, Nágas, and Doanias live almost entirely by *jhúm* cultivation, and are very ignorant, both of which circumstances would have exposed these reserved forests to much danger from encroachments, if the villagers had been allowed to remain. The following compensation was paid to them :—

	Rs.
To Gáro villagers in the Bagmara reserve, Gáro Hills	960
" " Angaratali reserve "	2,310
To Nága villagers in the Desai reserve, Sibságar district.....	20
To Doania villagers in the Upper Dehing reserve, Lakhimpur district ...	100
Total.....	3,390

Boundary work.

22. Close attention has been paid, as hitherto, to the clearing of boundary-lines and the repairs of the boundary-marks. The tabular statement, Appendix II., of this report, shows the work done in the fullest detail. The total length of demarcated boundaries at the close of the year was 1,079 miles, or 39 miles more than in the previous year. The number of boundary-marks kept up was 4,817, as compared with 5,113 in 1886-87, showing a decrease of 296 effected for economy's sake. All the lines were cleared, and the boundary-mounds repaired where necessary, and 958 miles were inspected out of the total of 1,079 by the Divisional Officers.

23. As already stated in last year's report, every effort is being made to reduce the cost of demarcation work without lessening its efficiency. The expenditure in the year under report has been Rs. 3,953, as compared with Rs. 5,821 spent in the previous year.

Account of changes in area and cost of boundary work according to divisions.

24. The changes in the boundary work and the cost of demarcation in the different divisions during the year have been as follows :—

Gáro Hills division.

25. In the Gáro Hills division the total expenditure on demarcation work was Rs. 112-11-3, which is exceptionally low, because the Divisional Officer considered most of the lines sufficiently open not to require clearing in the year under report, besides which Rs. 66-10-9 out of that amount were paid for the previous year's work, reducing the expenditure to Rs. 46-0-6 on the 11 miles of line cleared. This is Rs. 4-3 per mile, as compared with Rs. 6-2-6, the cost in the previous year.

26. There are several changes in the length of boundaries and the number of boundary-marks in the Gáro Hills Division, as shown in Appendix II. The former has decreased, because natural boundaries have been chosen for survey lines at a re-survey of some of the forests, which latter also proved the necessity for more boundary-marks.

27. Out of a total length of demarcated boundary-line of 126 miles, 110 miles were inspected by the Divisional Officer, or Mr. Kelly, the Sub-Assistant-Conservator attached to the Gáro Hills Division. These were all in the northern range. Press of work in this part of the division prevented the 16 miles of demarcated boundaries in the southern range being inspected by any one of these officers.

Goálpára division.

28. In the Goálpára division the total expenditure on demarcation in the year under report was Rs. 290-9; but out of this Rs. 75 were paid for the previous year's work, which leaves Rs. 215-9, or Rs. 2-6-5 per mile, as compared with Re. 1-6-5 spent on this work in the previous year.

29. This expenditure, although more than last year's, is very low, and Mr. Copeland goes on persevering in his efforts to get the clearing of boundary-lines done by villagers living in the neighbourhood in return for privileges granted to them. The future clearing of the southern boundary of the Bijni reserve, 14 miles in length, has now also been arranged for in this way.

30. The 7 miles additional length of boundary-line and the 5 additional boundary-marks are, as shown in Appendix II., due to the newly-declared Muktaigaon reserve.

All the boundaries were inspected by the Divisional Officer.

Kámrúp division

31. In the Kámrúp division the demarcated boundaries are very extensive, but the comparatively speaking large population living in the proximity of the reserves has enabled Mr. Mein to get the clearing of lines and the repairing of boundary-marks done by villagers at little cost, in return for privileges granted them, chiefly in the way of dead Sâl posts for their houses and firewood.

32. The total expenditure in this division on boundary work has been Rs. 351-6 as compared with Rs. 403-4-5 spent in the previous year. This is 14 annas and 10 pie per mile, or less than in any other division.

33. The changes shown in Appendix II. in the Kámrúp division are very small. They are in the Milmillia reserve an additional length of 10 chains of line, and in the Mayang reserve a reduction by one mile, made according to re-measurement.

34. Only 2 miles out of the total of 380 were not cleared in the year; the 1,757 boundary-marks were all repaired where necessary.

Out of 380 miles, the total length of demarcated boundaries, the Divisional Officer inspected 346, the remaining 34 miles were inspected in the previous year.

Darrang division.

35. In the Darrang division the total expenditure on demarcation work during the year was Rs. 194-9, out of which Rs. 21-6 were spent on the demarcation of the proposed addition to the Charduar reserve, leaving Rs. 173-3 expended on the 29 miles shown in Appendix II., or Rs. 5-15-6 per mile, which is about the same as was spent on this work in the previous year.

36. The total length of boundary-line remained unchanged, but the boundary-marks in the Khalingduar reserve were reduced from 104 to 34, as they stood unnecessarily close to each other; those at the Garumári reserve were increased to 39. All lines were cleared and inspected by the Divisional Officer, and boundary-mounds repaired where necessary.

Nowgong Division.

37. In the Nowgong division the length of demarcated boundaries has been increased from 72 to 116 miles on account of the newly-gazetted additions to the Kholahat and Doboka reserves and the proposed Duár Jangthung reserve, for the same reason boundary-marks were increased from 628 to 937.

38. As a natural consequence of this additional boundary work, the total expenditure has increased to Rs. 483-6, compared with Rs. 308-0-6 spent in the previous year; the cost per mile, however, was only Rs. 4-2-10, whilst Rs. 4-6-4 were paid in the previous year.

39. The Divisional Officer has here also succeeded in keeping down expenditure on this work by getting part of it done in return for privileges granted to the villagers living near the reserves.

40. All but 100 boundary-marks out of a total number of 937 were repaired, and all but 2 miles out of a total length of 116 miles of boundary-lines were inspected by the Divisional Officer.

Sibságar division

41. In the Sibságar division 15 chains of boundary-line have been added in the Desai reserve, and 17 boundary-marks in the Diroi reserve. Out of a total length of 140 miles of demarcated boundaries, 126 miles were cleared and 123 miles inspected by the Divisional Officer, and 272 boundary-marks out of 285 were repaired.

42. The expenditure on demarcation work in this division has been Rs. 504-13, or Rs. 4 per mile, as compared with Rs. 5 per mile paid in the previous year. The Mikir Hills reserve boundaries 35 miles long were cleared, and the boundary-marks repaired by the two forest guards posted to that reserve without extra payment.

43. Besides the above Rs. 504-13, a sum of Rs. 42-6 was spent in cutting paths to inspect the natural boundaries of the Nambor and Rengma reserves, and classified under "A.VIII.*a*. Demarcation."

Lakhimpur division

44. In the Lakhimpur division considerable changes have been made in the demarcation of the reserves during their final settlement. These changes are shown in detail in Appendix II: of this report.

45. As already stated, it has been decided not to make the whole of the Parapara forest a reserve, as proposed originally, and its demarcation is, therefore, not kept up any longer; in the Upper Dehing reserve the length of demarcated boundary has been reduced from 48 to 39 miles and the boundary-marks from 432 to 145; in the Jokai reserve the length of the demarcated boundaries was reduced from 11 miles to 9, and the boundary-marks from 182 to 39; in the Jaipur proposed reserve the length of demarcated boundary line remained the same, but the boundary-marks were reduced from 269 to 49.

46. Of the 113 miles of boundary-lines, 41 miles in the Upper Dehing reserve, being the Railway concession land, were not cleared, since there is no necessity for doing this oftener than every third year, as was already explained in paragraph 68 of last year's report, and that portion of the Inner Line which is also the boundary of the proposed Jaipur reserve, and measures 1 mile 60 chains in length, was not cleared for political reasons. Of the 352 boundary-marks all were repaired, except the 53 of the Railway concession area, which will, like the line, be repaired only every third year. The Divisional Officer inspected 66 out of 113 miles of boundary.

47. The total expenditure on demarcation work during the year was Rs. 1,005-12; but Rs. 25-2 of this were paid on account of the previous season's work, which leaves the actual expenditure for the season under report Rs. 980-10, as compared with Rs. 781 spent in 1886-87. The increase is due to the settlement made in the year under report, which necessitated a considerable amount of new boundary work. It comes to Rs. 14 per mile, as compared with Rs. 9 paid the year before.

Cachar division.

48. In the Cachar division only 2 miles 40 chains of line and 30 boundary-mounds have been added to the demarcation work done in former years. This increase became necessary on account of the rectification of the Boruncherra estate boundary, which is also that of the Katakhal reserve.

49. With the exception of 1 mile and 73 chains in the North Cachar Hills, all boundaries were cleared and boundary-mounds repaired, and 66 miles inspected by the Divisional Officer out of a total of 71.

50. The expenditure on demarcation work during the year in the Cachar division was Rs. 947-10-6, or Rs. 389-10-6 more than in the previous year. Part of this increase is due to the clearing and demarcating of the new boundary in the Katakhal reserve above referred to; but still the expenditure has been high, and no satisfactory explanation has been furnished by the Divisional Officer for this large increase. It makes the cost of boundary work Rs. 13-11 per mile, whilst in 1886-87 it only came to Rs. 8-5-3.

Sylhet division.

51. In the Sylhet division all boundaries are natural ones, such as streams and the ridges or base of hills, so that no expenditure was incurred on demarcation.

52. In the Khási Hills division the boundaries of the Saipung reserve are all natural, and those of the Shillong estate and the Riatkhwan leased forest are all cleared as fire-lines, whilst the boundary-marks are masonry pillars which require but few repairs. Rs. 19-12-6 were spent on this account during the year under report.

Khási Hills division.

CHAPTER II.—SURVEYS, WORKING PLANS, AND PLANS OF OPERATION.

53. The chief forest survey work was done, as in the previous year, in the Gáro Hills, under the supervision of Mr. C. P. Fisher, the Officer in charge of the Working Plans division, by Forest Ranger Babu Upendra Nath Kanjilal, who is a passed surveyor, and two other trained native surveyors.

Surveys.

54. It comprised the Songsak and Rongrengiri forests, of which in the previous year only some traverse surveys had been made, and a few interior topographical details been noted. The survey of these two forests was completed, and the total areas divided into compartments, as this is required to prepare working plans for those forests, and they were demarcated where necessary.

These surveys were tested before the close of the season by the Divisional Officer and the forest-ranger.

55. In the Songsak reserve, comprising an area of 8,005 acres, 895 angles were observed and 2,622 chains measured and 123 boundary posts and mounds erected. The cost of this work came to Rs. 2,681, or Rs. 223 per square mile, including one-sixteenth of the Divisional Officer's pay and travelling allowance, to which last year's expenditure must be added, bringing up the total expenditure incurred to Rs. 4,942, or Rs. 412 per square mile.

56. In the Rongrengiri reserve, comprising an area of 8,860 acres, 1,057 angles were observed and 3,617 chains measured, and 1,2 boundary-posts and mounds put up. The cost of this work came to Rs. 2,076, or Rs. 159 per square mile, which, as in the Songsak survey, includes three-sixteenths of the Divisional Officer's pay and travelling allowance, and to which last year's expenditure has to be added, which makes the cost of the survey of this forest Rs. 4,397, or Rs. 338 per square mile.

The other three-fourths of the Divisional Officer's pay and travelling allowance for the field season are charged to the valuation surveys carried on in the Darugiri reserve.

57. The following table shows in detail the nature of the different charges incurred in the survey of these two forests during the last two years :—

Nature of charges.	Songsak reserve.			Rongrengiri reserve.		
	1886-87.	1887-88.	Total.	1886-87.	1887-88.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Proportion of pay and travelling allowance of supervising officer.	399	151	550	199	453	652
Ditto ditto of native surveyors	722	723	1,445	1,159	300	1,459
COOLIE LABOUR.						
Line-cutting	961	524	1,485	878	411	1,289
Carrying of provisions.....	42	524	566	24	390	414
Building of huts	38	34	72	16	16	32
Miscellaneous, such as commission for collecting coolies, carriage of instruments and passage of coolies, &c.	99	725	824	45	506	551
Total	2,261	2,681	4,942	2,321	2,076	4,397

The preparation of the maps is not included in the above calculation, as that has still to be done.

58. The high cost of these surveys is accounted for by the necessity of having to import the labourers and to have to pay them exceptionally high wages, the necessity for having to carry all provisions from three to six days' journey into the hills, and the general unhealthiness of the locality.

59. Last year Kachári coolies were used for survey work; but as these men will not remain in the field until the 1st of May, and because they will not carry provisions, hill men had to be arranged for from the Khási Hills, which somewhat increased the expenditure; and out of a total number of 15,370 days which the work of these men represented, not less than 3,877 were lost in consequence of illness.

60. The consequence of this was that the cost became high, as compared with survey work carried on under ordinary conditions; it was Rs. 183 per square mile for the season, whilst the cost of the actual survey in the Songsak and Rongrengiri reserves was only Rs. 96 per square mile.

61. The Divisional Officer in the Gáro Hills completed the boundary survey of the proposed Bandrapara and Angaratali reserves and of the Mornai and Fulbari timber depôts without extra expenditure.

62. In the Darrang division the boundary of the proposed addition to the Charduar reserve, 9 miles 65 chains long, was surveyed by the Divisional Officer at a cost of Rs. 67-8, and the area burned in the Balipara reserve, 66 acres, was surveyed at a cost of Rs. 4-8, making the total expenditure under this head Rs. 72.

63. In the Nowgong division the boundaries of the Seeldharampur, Suang, and Kakrakata forests selected as reserves and measuring 12 miles in length, were surveyed by the Divisional Officer at a cost of Rs. 25. The balance of Rs. 21 shown in the summary of expenditure under this head was paid for maps prepared locally.

64. In the Sibságar division small boundary surveys about 6 miles in length, were made in the Diroi, Doyang, and Desai reserves at a total cost of Rs. 9-14.

65. In the Cachar division several small surveys made cost Rs. 11-1, and another Rs. 7 were paid for maps made locally.

Working plans.

66. A Working Plans Division was established in 1886-87. It is the duty of the officer in charge to superintend the surveying and mapping of the forests and otherwise to collect and record all statistical data regarding the areas and boundaries of forests, their division into blocks, compartments, and sub-compartments for systematic management, the recording of the nature and contents of the different forests, the preparation of working plans, and eventually to watch that the exploitation is carried out in accordance with such working plans as may have been sanctioned.

67. In the year under report all data collected respecting the Dambu forest last year were tabulated and arranged, thirty-four copies of maps were prepared on paper, and fifty-six tracings of various other maps made.

68. The survey of the Darugiri forest had been carried out in 1886-87, and in the year under report the forest has been divided into compartments and sub-compartments, as shown in detail in the area statement, Appendix III. of this report, and other necessary data for preparing a working plan for this forest were obtained, and a careful valuation of the growing stock carried out by means of linear valuation surveys, which extended over 491 acres out of a total area of 1,960 acres of Sâl forest, or 25 per cent. All these countings were made by the Divisional Officer, with the exception of 30 acres, which the forest-ranger did. The latter countings were also checked by the Divisional Officer. The result of these valuation surveys is shown in detail in Appendix IV. of this report.

The total number of trees counted was 139,510, out of which 22,881 were Sâl.

The condition of the growing stock, the state of regeneration, and the nature of the soil in each compartment have also been properly recorded.

69. The concentric rings were counted in 25 Sâl-trees. The result is shown in tabular form in Appendix V. of this report, and another table is given as Appendix VI., which shows the measurements of heights of 50 Sâl-trees and their lengths of bole.

70. In addition to this, a sample area, containing 140 trees, was demarcated in the Darugiri reserve for biennial measurements to ascertain with accuracy the periodical increase in size of Sâl-trees at different ages.

71. The total expenditure during the year on this work has been Rs. 4,601.

Annual plans of operation.

72. The system hitherto in vogue that Divisional Officers submit their annual plans of operations through their respective Deputy-Commissioners to the Consevator has been adhered to, and, with a few minor exceptions, all the works sanctioned were carried out during the year under report.

CHAPTER III.—PROTECTION AND IMPROVEMENT.

Establishments.

73. The permanently-sanctioned protective establishment in the Assam Forest Department is small, and has, on account of the large additional areas gazetted as reserves since it was sanctioned and the further development of trade in forest produce, to be strengthened annually by a large temporary establishment.

74. The cost of the latter was, for economy's sake and in consequence of the falling off in the export trade in Sál in previous years, again reduced in the year under report. The sanctioned amounts and the actual cost during the last three years have been as follows:—

	1885-86.	1886-87.	1887-88.
Sanctioned	29,129	24,293	24,663
Actual cost	20,240	19,567	19,940

75. The employment of temporary establishments has many disadvantages, and if receipts continue as satisfactory as has been the case in the year under report, the permanent sanction for part of the at present temporary establishment will be sought.

General protection against breaches of Forest Law.

76. The number of prosecutions for breaches of Forest Law are shown in the Tabular Statement No. 50 of this report. There has been a slight increase in cases and in persons prosecuted, which can, however, not be taken as indicating an increase of crime, but rather as the natural consequence of better supervision and better rules introduced during the year, because such rules facilitate, as they are intended to do, the discovery of offences, and they do not prevent them until they have been in operation for a short time. The offences, taking them as a whole, are petty, especially those committed by the ordinary inhabitants; the more serious ones are almost invariably committed by persons in the employ of traders, put up to it by their employers.

77. The new cases instituted for setting fire to forests are 8, or double the number of such cases in the previous year. Some of these firings of forests are very simple, and then compounded by the Forest Officer under Section 67 of the Forest Act, whilst with others there is the greatest difficulty of bringing them home to any one.

78. The acquittals as regards cases are about half the number of the convictions, but as regards the number of persons, the convictions are almost three times the number of the acquittals. These proportions should be looked upon rather as a proof that nearly all magistrates are disposed to deal very leniently with forest offences, and that these offences are generally very difficult to prove, than that the forest officials have been interfering unnecessarily.

79. The only unauthorized grazing occurred in the forests of the Shillong estate in the Khási Hills, where fodder becomes very scarce in the dry season.

80. Under Section 67 of the Forest Act the following cases were compounded for the amounts stated :—

Name of district.	Number of cases.	Number of persons.	Amount. Rs.	As.
Gáro Hills	4	4	170	0
Goálpára	4	11	184	0
Kámrúp	51	69	181	5
Darrang	3	11	56	0
Nowgong	26	29	409	0
Sibságar	25	29	633	8
Lakhimpur	28	13	4,300	0
Cachar	7	10	56	8
Sylhet	5	5	18	4
Total	193	181	6,308	9

81. This is a large increase of the cases compounded, as compared with former years. For various reasons the procedure has much to recommend it, as the ordinary inhabitants dread having to go to court and being prosecuted, much more than the actual fine imposed on them by the court.

Forest fires.

82. The protection of the Government forests against fire has again been very successful, in spite of the season having been an exceptionally dry one.

Full particulars about this work will be found in the Tabular Statement No. 51 of this report. The area which it was attempted to protect this year came to 191,887 acres, or

13,799 more than in the previous year: and, similarly, the area successfully protected was 187,959 acres, or 11,912 more than in the previous year; and for all this, and the season having been a most unfavourable one, the expenditure was Rs. 1,929 less, which must be considered as very satisfactory. The only blot on this year's fire protection is the increase by 1,857 acres in the area burnt, which is entirely due to the fires in the Darrang division under Mr. Jellicoe.

83. The percentage of failures to area attempted during the last five years has been the following:—

	Percentage of failures to area attempted.				
	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
Gáro Hills division	.....	.....	.....	.....	1·11
Goálpára „	64·32	2 51	·85	2·27	·63
Kamrúp „	11·09	10 09	6·24	·18	·01
Darrang „	16	1·69	.....	.....	16 87
Nowgong „	·35	·17	3·08	·53	1·04
Khási Hills „	·41	·63	.....	3·49	.....

84. This statement shows a great improvement in the Goálpára, Kámrúp, and Khási Hills divisions, as compared with the four previous years, whilst in the Nowgong division the result is not so good as in last year, but better than in 1885-86. In the Darrang division the record is, as already said, bad.

85. The decrease in expenditure, the increase in area attempted, and that actually protected, as well as the decrease in the latter according to divisions was as follows:—

	Decrease in expenditure as compared with previous years. Rs.	Increase in area attempted to be protected in acres.	Increase in area actually protected in acres.	Decrease in area actually protected in acres.
Goalpára division ...	1,398	3,200	4,399	.....
Kámrup „ ...	295	2,900	3,003	.....
Darrang „ ...	12	.....	.....	3,129
Nowgong „ ...	4	787	773	.....
Khási and Jaintia Hills division.	352	.....	160	.....
Total ...	2,061	6,887	8,335	3,129

86. The cost per acre successfully protected in the different divisions during the last five years is given below for comparison:—

	1883-84.		1884-85.		1885-86.		1886-87.		1887-88.	
	As.	P.	As.	P	As.	P.	As.	P.	As.	P.
Gáro Hills division ...	...		...		...		...		0	3
Goalpára „ ...	3	6	1	2	1	2	1	0	0	9
Kámrúp „ ...	0	11	1	3	0	9	0	9	0	8
Darrang „ ...	0	3	0	3	0	4	0	3	0	5
Nowgong „ ...	2	1	1	9	0	6	0	3	0	4
Khási and Jaintia Hills division	6	3	6	7	3	6	3	8	2	6

87. Maps showing the precise locality where fires have occurred in the different forests, and tabular statements showing the degree of damage done, have been submitted by all the Divisional Officers, and form a permanent record for future reference in the Conservator's Office, as well as in those of the divisions concerned.

88 Those areas of reserves which, on account of dampness prevailing and the evergreen foliage of trees, require no special measures of protection against fire are the following:—

	Square miles.
In the Darrang division	265
„ Sibságar „	752
„ Lakhimpur „	302
„ Cachar „	745
„ Sylhet „	170
„ Khasi and Jaintia Hills division	50
Total	2,284

Account of fire protection according to divisions.

89. The following is a more detailed account of fire-protection work according to divisions.

Gáro Hills division.

90. In the Gáro Hills division regular fire-protection was attempted this year for the first time in two sâl forests, the Dambu and Darugiri reserves, extending over an area of 6,812 acres. There occurred two fires in the Dambu forest: the first originated in the carelessness of the men employed in burning the fire-lines, when 2 5 acres were burned, but it was all grass land without trees; the second fire spread from an adjoining *jhúm* burned off by the cultivators, who did not take proper precaution to prevent the fire from spreading into the reserve. The day was rainy, which was the reason the people were not more careful; but it also prevented the fire doing as much damage as it would have done on a dry day, besides which, the locality was wet, which made the fire comparatively harmless. The area burned was 73 5 acres.

The fire-lines had been cut by the 10th of December, and the burning of them commenced on the 17th of that month, but was not completed until March in wet localities.

91. The total expenditure incurred on this work was Rs. 91-12-3, or 3 pie per acre successfully protected, which is little, and no doubt a higher expenditure will be necessary in future years to ensure success.

92. Out of a total area of 85,255 acres liable to be burned in the Gáro Hills, but for the protection of which no special measures were adopted for want of funds, an area of 23,501 acres was burned and 61,754 acres escaped.

Goálpára division.

93. In the Goálpára division the work of fire-protection has been this year the most successful on record, and is a great credit to Mr. Copeland To the areas formerly protected the new Muktaigaon reserve, 3,200 acres, has been added, and the area successfully protected is more by 4,399 acres, whilst the total expenditure is less by Rs. 1,398, reducing the average cost per mile successfully protected in the Goálpára division to Rs. 28-12-5, as compared with Rs. 42-13-5 in the previous year.

94. Out of the total area, 489 acres, burnt, 175 were due to accident in burning the fire-lines, and 311 to outsiders, who were caught in every instance.

95. The Sidli reserve was for the purpose of fire-protection divided into 4 blocks and 14 patrolling stations, the same as in the previous year. Some of the external fire-lines were cleared free of cost by villagers in return for free grants of forest produce for home consumption. The rest of the fire-lines was done by contract.

96. In the Guma reserve also the total area was divided into 4 blocks and 7 patrolling stations, and all the fire-lines cleared by contract, as in the previous year.

97. The Panbari and Pechadaveri reserve was divided into 2 blocks, but all the clearing of fire-lines done by villagers, free of cost, as was also the case in the Bengtol and Darogaon reserve, but fire-guards had to be kept to warn travellers and others passing through the forests and to put out if possible, any fires that might occur.

98. The Bhumeswar Hill was protected in the same way as the last two, whilst all the clearing of fire-lines in the Muktaigaon reserve was done by ryots from the opposite side of the Sankos river (Bengal) in consideration of dead wood for house posts, fuel, and drift wood which they were allowed to remove from the Sankos river.

99. Mr. Copeland has also made efforts to keep the fires out of the Sidli and Bhumeswar Hill reserves by leasing out 483 acres of land adjoining the forest, and within the boundaries of these reserves for paddy cultivation at the usual rates.

100. The following table shows the expenditure on line-clearing and establishments, as well as the average cost of protection per square mile in each forest separately :—

Name of reserve	1886-87.					1887-88.				
	Area in acres.	Cost of establishment.	Cost of fire-lines and huts.	Total cost	Average cost per square mile.	Area in acres.	Cost of establishment.	Cost of fire lines and huts.	Total cost.	Average cost per square mile.
		Rs.	Rs.	Rs	Rs.		Rs.	Rs.	Rs.	Rs.
Sidli	43,757	639	1,936	2,575	38	43,757	613	749	1,362	20
Guma	15,776	886	1,268	2,154	87	15,776	640	1,109	1,749	71
Panbari-Pechadaveri ..	3,290	.. ...	133	133	26	3,290	95	.....	95	18
Bengtol Darogaon.....	7,470	.....	.....	.....	.....	7,470	70	.....	70	£
Bhumeswar Hills	4,033	.....	.....	.....	.....	4,033	107	.. ...	107	17
Muktaigaon	.....	.....	.....	.....	.....	3,200	81	.....	81	16
Total ...	74,326	1,525	3,337	4,862	50	77,526	1,606	1,858	3,464	29

101. In the Kámrúp division also has the fire-protection been most successful during the year. The area which it was attempted to protect was 2,900 acres more than in the previous year, and the area actually protected was 3,003 acres more.

Kámrúp division

102 The expenditure on this work during the season under report in the Kámrúp division was Rs 2,503, or Rs 295 less than in 1886 87, which makes the average cost per square mile Rs. 25-8-1, as compared with Rs. 30, the cost for last year.

The proportion of this paid for establishments and that paid for clearing fire-lines was as follows:

	Rs.
Cost of fire-conservancy establishment	911
„ of clearing fire-lines	1,592
Total	2,503

The reduction in expenditure was mainly effected by alterations in the fire-lines and the burning off of more grass lands surrounding the forests than it had been possible to do in the previous year.

103. All the forests on private estates in the Kámrúp plains, as well as in the Khási Hills adjoining the reserve, got burnt, and much endangered the safety of the Government forests.

104. The cultivation of grass lands adjoining the reserves as an extra precaution against fires was encouraged, as hitherto, by charging less rent or giving the use of the land free.

105. Although no complete arrangements of fire-protection were made for the remaining forests in the Kámrúp division, the following areas have not been burned during the season under report:—

	Acres.
Gizang reserve	640
Jaipur.....	700
Barjuli	1,000
Jharikhuri	600
Buragohain	400
Mogakhal	170
Total	3,510

106. In the Darrang division the protection of additional areas was not attempted, and 3,129 acres were burned after their successful protection for several years. The culprits were not caught in one instance, and the protective measures were as costly as in former years. All this does not do credit to Mr. Jellicoe, particularly not, if these unfavourable results are compared with the great success in the Goálpára division, where he was formerly in charge, and declared it impossible to protect the forest against fire, much less to reduce expenditure, all of which has now been accomplished in that division.

Darrang division

107. The total expenditure on fire protection in the Darrang division was Rs. 364, as compared with Rs. 376 in the previous year. This is Rs. 15-1-10 per square mile successfully protected, as compared with Rs. 12 paid in 1886-87. The proportion in which this was paid for establishments and the clearing of fire-lines was as follows:—

	Rs.	As.
Cost of fire-conservancy establishments	103	4
Cost of clearing fire-lines	261	0
Total	364	4

108. There were altogether four separate fires, one of which was in the Bálipára reserve, when 66 acres were burnt. It is believed to have been lighted by the police patrol, but nothing was proved.

The other three fires occurred in the Khalingduar reserve, the first and largest of which took place on the 10th of January 1888, when about 2,435 acres were burned. It is suspected that this fire was caused by the Bhutias of Hati-matikhoa village for the purpose of driving away a herd of wild elephants, after one of these animals had been killed by them in the reserve to get the tusks.

The second fire occurred on the 15th of February, and burned 510½ acres of Khair forests, and the third fire on the 1st of March burned 117½ acres, one-third of which is said to have been grass land without trees.

Nowgong division.

109. In the Nowgong division the area it was attempted to protect against fire was 21,620 acres, or 887 more than the previous year. This was part of the new Kholahat reserve, and the area actually protected was 21,395 acres, or 773 more than in 1886-87, whilst the total expenditure came to Rs. 418, or four rupees less than last year, which is Rs. 12-8 per square mile, as compared with Rs. 13 paid last year, a record on the whole satisfactory

110. There were two fires during the season, one in the Kholahat reserve in the beginning of April, which originated in an adjoining tea estate, and spread to the reserve. The day was a very windy one, in consequence of which all attempts to stop the fire at the external fire-lines failed. The culprit who lighted the fire was not discovered.

The second fire took place in the Bamuni reserve, which burned 200 acres. This was lit by two men, who were caught, prosecuted, and convicted.

111. The proportion paid to extra fire establishments and such as was paid for line clearing was as follows:—

	Rs.
Cost of fire-conservancy establishment	217
Cost of clearing fire-lines	201
Total	418

Khási and Jaintia Hills division.

112. In the Khási and Jaintia Hills division all the areas protected in former years were again attempted this year with perfect success.

113. The expenditure incurred came to Rs. 716, or Rs. 312 less than in the previous year, which is very satisfactory, considering that the areas are all pine forests, and therefore require much more expensive arrangements to keep the fires out of them than other forests.

The proportion paid out of the total expenditure on account of the Shillong estate was Rs. 608, whilst that paid for the protection of the Riatkhwan forest came to Rs. 108.

Natural reproduction

114. The regeneration in the forests of Assam is more than sufficient everywhere. At present this is not of such great importance, since the growing stock is much in excess of the demand; but the climate, generally speaking, is so favourable to all vegetation, that even if exploitation largely increased, it would not soon interfere with the regeneration of the forest, and Sâl, the most valuable tree in the Province, produces young and healthy seedlings in greater abundance than almost any other tree.

Artificial reproduction

115. Every attention has been paid to the maintenance and improvement of existing plantations, but no extensions were made, because there had been a deficit in the department for three years, caused by the stagnation in the export trade of Sâl. The financial result in the year under report are sufficiently encouraging to make provision for extensions in future budgets, and this will be done

116. An area of 35 acres in the Nambor forest was planted with Ajhar at a cost of Rs. 3 only per acre, which, if there is no error in the calculation of area, would, as correctly observed by Mr. Barker, be very satisfactory. The work was inspected by the Conservator, and the plants found looking very healthy.

117. The total expenditure on plantation work in 1887-88, as shown in Statement No. 52 of this report, was Rs. 4,892, as compared with Rs. 5,388 in the previous year, which is an average of Rs. 3-3-2 per acre.

Account of plantation work according to divisions.

118. The plantation work carried out in the different divisions was the following.

Gáro Hills division.

119. In the Gáro Hills division 55 Cinchona plants (*Cinchona succirubra*) are planted in the forest bungalow garden at Tura. They have made very little growth, and the locality seems unsuited. Rs. 4-8 were spent on keeping them clear of weeds during the year. Besides this, Rs. 56-10-8 were spent in the Gáro Hills division on preparing the ground for sowing Sâl in the Dambu reserve, making the total expenditure on plantation work Rs 61-2-8 in 1887-88.

Kámrúp division.

120. In the Kámrúp division no extensions of plantations were made, but the condition of all the existing plantations has greatly improved Full details will be found in Appendix VII. of this report.

121. The growth of the trees in the Rubber plantations has been excellent, and they are looking most promising everywhere.

122. The young Teak-trees have done equally well in all the different compartments. They are perfectly healthy and strong, and the different areas are everywhere fully stocked.

123. The growth of the young Ajhar (*Lagerstrœmia Reginæ*) has been very good. They are beginning to get the better over the rank grasses in the plantation, and the Sisu-trees are also vigorous.

124. The Bamboo plantations have turned out a great success. They have not been used for the manufacture of paper stock, as originally intended, but they supplied this year all the material for the plantation buildings, and there will be a large quantity for sale in a year or two; and as bamboos fetch good prices in Kámrúp, this plantation will no doubt be remunerative.

125. The few Ceara Rubber-trees there are still left have grown much the same as before. Their quick growth in the first year or two is very deceiving.

126. The Maipak-trees (*Evodia meliæfolia*) continue to grow well. One of them bore seed during the year, it ripened in November, and was sown in nurseries at once. There are several hundred healthy seedlings now ready for planting out into the plantation.

127. The Cinchonas (*Cinchona succirubra*) have not done much better in Kámrúp than in the Gáro Hills. There are now 109 plants alive.

128. The growth of the *Pithecolobium*-trees is most luxuriant; they flower, but up to date have given no seed. The paper Mulberry (*Broussonetia papyrifera*) grows equally well and seeds profusely, whilst the Phillipine plantains just keep alive, and nothing more.

129. The African Rubber plant (*Landolphia florida*) has done somewhat better than the American (*Castilloa elastica*), but Assam seems too cold for both of them.

130 The expenditure on plantation work in the Kámrúp division during the year under report has been as follow:—

	Rs.
On rubber plantations	270
„ timber ditto	190
„ experimental planting and nurseries generally	42
„ establishment	240
Total	742

Darrang division.

131. In the Darrang division plantation work is confined to the cultivation of Rubber-trees (*Ficus elastica*). The Charduár plantation was at the commencement of the year 1,043 acres. No extension has been shown in Statement No. 52 of this report, but 20 lines of an average length of 20 chains each were opened out and 396 mounds thrown up ready for planting in seven of those lines, at a total cost of Rs. 50. They will be planted in the current year.

132. Line-clearing is the chief work in the old plantation, but, on account of the vigorous growth of the trees, the necessity for this is rapidly becoming less. In the year under report most of the lines had only to be cleared once.

133. Very little damage was done to the plantation by wild elephants, deer, and insects in the year, as compared with the past.

134. The growth of the trees continues to be most vigorous, and their condition all through the plantation is healthy and very promising.

135. The few Rubber plants which were planted in the forks of trees have thrown down some more roots, but the latter are not strong, and there is little hope of these plants making vigorous growth for a number of years to come, since the dry season is very much against them.

136. Of the timber trees planted in the lines between the Rubber-trees, all but the Ajhar (*Lagerstrœmia Reginæ*) have done well. The latter are still backward in their growth. 663 Poma (*Cedrela Toona*) were planted out during the year.

137. The fencing of the nurseries was removed, and the young trees have not suffered from deer or in any other way since.

138. To the small experimental Rubber plantation on the Bamoni Hill near Tezpur nothing was done, but a fire-line cleared round it. The trees in this plantation look also healthy and strong, and the grass and other undergrowth have nearly all died off in consequence of the shade given by the Rubber-trees.

139. Full details as regards the measurements of trees, the condition of the plants in the nurseries, the expenditure during the year, and rainfall are given in Appendix VIII. of this report.

Sibságar division.

140. In the Sibságar division due attention was paid to the clearing of areas planted in the Nambor forest. Some 50 acres planted with Ajhar in former years were weeded and cleared, and vacancies filled up at a cost of Rs. 3-12 per acre, which is a great improvement on the cost of this work in former years.

141. In the same locality an additional area of 35 acres was planted in narrow lines with young Ajhar plants, 6 feet apart, at Rs. 3 per acre, which is, as already said, still more satisfactory, if there is no error of calculation. A nursery, measuring three-fourths of an acre, was also made in the Nambor Forest for Poma (*Cedrela Toona*). The seed germinated well, but the heavy rains killed about half of the seedlings shortly afterwards. 900 were planted out during the year.

142. The total expenditure on plantation work in the Sibságar division during the year was Rs. 305. It is intended to provide more funds for this work in the next budget.

Sowing and planting on *jhúmed* lands.

143. Further endeavours have been made to induce people who live by *jhúm* cultivation to clear old *jhúms* in reserves, and to sow or plant them with timber trees before they give up their fields, but mostly such efforts have shown that people have the greatest possible aversion to subject themselves to interference; and as there is a very great abundance of land available for *jhúming*, and as they are not taxed on such lands, cultivators very naturally prefer to have their fields where they will not be interfered with; and as to the cutting down of well-stocked forests, for the timber of which there is no demand at present, and which would therefore be wasted, on the chance of getting better kinds planted, this seems unjustifiable, because the local timber trade in the immediate future will be almost entirely in the inferior kinds for the manufacture of tea-boxes.

144. In the Kámrúp division, Mr. Mein had an area of 302 acres of *jhúms* in the Pantan and Chhaygaon reserves sown with Poma (*Cedrela Toona*), but only 98 acres out of that area were successful.

145. In the Goálpára division, Mr. Copeland has made great efforts to get some of the grass lands inside reserves cultivated, and at the same time planted with Sál. 756 acres were thus planted in the Sidli reserve, 511 in the Bengtol Darogaon reserve, and 50 acres in the Bhumeswar Hill reserve All this cultivation was allowed free of rent on the condition that it be sown or planted with Sâl.

146. In the Nowgong division, the Mikirs still living in the Doboka reserve were again pressed by the Divisional Officer to sow and plant trees on the old *jhúms*; but they steadily refused, pleading ignorance and fear of incurring the Forest Officer's displeasure in case of failure, and no persuasion was sufficient to induce them even to make an attempt at it. It will require some time and perseverance everywhere to succeed in this matter. The Conservator is urging on all Divisional Officers not to get slack in their attempts to get the work done.

Cutting of climbers.

147. Systematic cutting of climbers in the Sâl forests was only carried out in the Kámrúp division, where 8,280 acres were gone over, at a total expenditure of Rs. 320, or about Rs. 26 per square mile.

Communications and buildings.

148. The most of the road work was done in the Gáro Hills division, as the Damra-Dambu cart-road was again transferred to this department from that of the Department Public Works, because it is at present used more for forest than for other purposes. The other divisions in which road work has to be done are Kámrúp, Darrang, Sibságar, Lakhimpur, and Cachar. The total expenditure of the department during the year on road work came to Rs. 3,490, as compared with Rs. 3,501 spent in the previous year.

149. All the larger Forest Department buildings were also re-transferred from the Department Public Works to the Forest Department in the year, as the Conservator considered he could do repairs for much less than the rents realized, and was, therefore, unwilling to surrender all rents in return for repairs.

150. The expenditure on buildings has, in spite of this, been somewhat less in the year under report; it was Rs. 6,293-2-11, as compared with Rs. 8,075 14-5 spent in the previous year. No new large buildings were erected, but considerable repairs had become necessary to several of the old buildings.

Account of road work and buildings according to divisions.

151. The following is a brief account of road work and buildings according to divisions.

152. In the Gáro Hills division, the chief road work was done on the Damra-Dambu cart-road, where all bamboo platforms were renewed, and bridges improved, stone walls constructed in many places to strengthen the road, cross drains and side drains improved, and the road widened where required. The expenditure on this work came to Rs. 1,283-15-5, and Rs. 111-11-3 were spent on repairs of other smaller roads and paths.

Gáro Hills division

153. The building work in the Gáro Hills division consisted of repairs to four bungalows, out-houses, and all huts constructed for the accommodation and shelter of subordinates at a total cost during the year of Rs. 576-9-5.

154. No road work requires to be done in the Goálpára division, as the forests are easily accessible by district roads and village paths, or, where these do not exist, by means of elephants.

Goálpára division

155. The building work in the Goálpára division consisted entirely of repairs. The total expenditure came to Rs. 1,210-7-11, distributed as follows amongst different ranges and the head-quarters of the Divisional Officer:—

	Rs.	As.	P.
Eastern Range	572	14	10
Western „	86	5	6
Guma „	116	4	7
Head-quarters	384	15	0
Total	1,210	7	11

156. In the Kámrúp division comparatively little had to be done to the four roads repaired in 1886-87, noticed in paragraph 167 of last year's report. The total amount paid for repairs on those roads came to Rs. 84-11 only, whilst Rs. 568-6-6 were spent on others, as follows:—

Kámrúp division

	Rs.	As.	P.
(1) On the Ukiam road	333	4	3
(2) „ the Rájápara road	161	9	6
(3) „ inspection paths and other miscellaneous items	73	8	9
Total	568	6	6

157. The building work in the Kámrúp division consisted of repairs only, some of which were, however, unusual, such as the re-thatching of the bungalow at the Kulsi plantation, which had lasted since 1876, or twelve years, a very exceptional time, accounted for by the steep slope of the roof and the good work done when the bungalow was built.

This work and the repairs of smaller buildings and coolies' huts at the Kulsi Range came to Rs. 725-1-6, and similar works done in all the other ranges came to Rs. 264-8, bringing the total expenditure on building work up to Rs. 989-9-6.

158. In the Darrang division the road work consisted chiefly of the annual repairs to the police road leading from the Balipara to the Bhalukpung stockade, through the Balipara reserve, and the construction of a new road leading to the Charduár Rubber plantation new bungalow. The work on the former cost Rs. 260-2, and on the latter Rs. 227-2.

Darrang division

The repairs to the other roads came in the aggregate to Rs. 130-1-10, making the total amount paid for road work Rs. 617-5-10.

159. The building work consisted of the construction of out-houses for the new Charduár plantation bungalow (which latter was constructed and paid for by the Department Public Works) and the repairs to the Bhairabighát Forest Bungalow. The expenditure on the former came to Rs. 507 4, and that on the latter to Rs. 278-5-6.

All the range offices and other smaller buildings, such as inspection huts and forest guards' houses, were repaired as usual, and all were in good order at the close of the year. The cost of this in the aggregate came to Rs. 257-8-6, and makes the total expenditure on buildings in the Darrang division Rs. 1,043-2.

160. In the Nowgong division no road work has to be done by this department, since all the forests are sufficiently accessible by district roads and village paths. Existing buildings were repaired and materials collected for the construction of offices in both ranges. The total expenditure under the head of buildings was Rs. 158-6-10.

Nowgong division.

161. In the Sibságar division the forest roads, or rather paths, which have to be kept open by this department, are numerous. In the year under report not less than 99 miles are said to have been cleared at a total cost of Rs. 356-15, or an average of Rs. 3-9-8 per mile.

Sibságar division

162. There was only one new building constructed. This was the office of the Jorhát range at Jorhát. The other buildings were repaired where necessary. The total expenditure on building work during the year came to Rs. 673-0-9.

Lakhimpur division.

163. In the Lakhimpur division little or no road work is attempted by this department, since there are numerous roads and paths in existence, which, although often not fit for travelling along on foot or on horseback, can be got along on an elephant. In the year under report the old Nitar Ali was opened out between the Dehingmukh reserve and the Trunk Road, but not paid for before the close of the year. The total expenditure under the head of roads in the Lakhimpur division came to Rs. 27-12 only.

164. The buildings to be kept up are, with the exception of the Forest Officer's bungalow in Dibrugarh, all temporary structures, intended to provide shelter for a few years until forest work is more settled and properly organized, when the inspection huts must be replaced by more permanent buildings. As to the huts for forest guards in Upper Assam, they are not required in many cases, because most of these men prefer, as a rule to live in villages near the forests, and, although this perhaps is not the best, it would not improve matters if living in the forests were insisted upon, as this would soon necessitate the employment of foreigners, which has great disadvantages; and as long as the patrolling is properly looked after, it does not much matter their living in villages at short distances from the forests.

All buildings were repaired where necessary. The total expenditure on this work in the Lakhimpur division during the year was Rs. 610-2-9.

Cachar division.

165. In the Cachar division road work was almost entirely confined to the road leading through the Katakhal reserve, as this had never been passable for ponies, and it was desirable to make it so to ensure proper control and regular inspection by forest officials, as it traverses an enormous tract of forest country, perfectly uninhabited and inaccessible. The total expenditure on road work in the Cachar division during the year came to Rs. 436-10.

166. No new buildings were constructed, but all existing ones repaired where necessary. The total expenditure under the head of buildings during the year in this division was Rs. 819-4-3.

Sylhet division.

167. In the Sylhet division no road work has to be done by the Forest Department, since the forests are sufficiently accessible by means of district roads and the very numerous rivers and smaller streams.

168. In Patharkandi, the head-quarters of the range, a new office was built, and at Maulvi Bázár, one of the river control stations, the same had to be done. The former cost Rs. 60, and the latter Rs. 50. Guards' huts were constructed at three different places at a cost of Rs. 48 in the aggregate, and others repaired. The total expenditure on buildings in the Sylhet division during the year was Rs. 196-15-6.

Khási and Jaintia Hills division.

169. In the Khási Hills division the small sum of Rs. 15-8-0 was expended on repairs to the forest guards' huts.

CHAPTER IV.—YIELD AND WORKING.

Departmental operations.

170. Timber operations by direct departmental agency have only been carried on in Assam from necessity, as was explained in paragraph 180 of last year's report.

171. The experience gained during the year in this respect in the Gáro Hills has again shown that such works can be carried on at much less cost, and therefore more satisfactorily, by purchasers themselves, and proposals were accordingly submitted by the Conservator to work the Dambu forest again through purchasers, as soon as any were found ready to do this work, and the change of system has been approved of by the Chief Commissioner.

172. The stock in hand at the commencement of the year, such as was received and disposed of during the year, and the balance remaining at the close of the year, are shown in detail in the Tabular Statement No. 56 attached to this report.

Experimental tapping of Rubber-trees.

173. The Rubber-trees on the Kaliajuli and Sonai Hills in the Balipara reserve of the Darrang district, which have been experimentally tapped for the last five years, were again tapped in the year under report under the personal supervision of Mr. J. T. Jellicoe, whose account of the experiment is attached to this report as Appendix IX.

174. Out of the 50 trees at first selected, two more have fallen in the year under report, reducing the number of the trees remaining, and which were tapped, to 44. In addition to these, two out of the six trees selected in 1884-85 (No. 51 to 56) were tapped also this year after two years' rest, and whilst the average yield per tree of these latter in 1884-85 was 12 seers and 10 chataks of rubber, the average per tree in the year under notice was 4 seers and 8¼ chataks. The outflow of the so-called milk or rubber in its crude state from these two trees is reported to have been remarkably fast, as compared with that of the trees which have been tapped every year.

175. The total yield of all trees was 1 maund 2 seers and 15 chataks, as compared with 1 maund 4 seers and 8 chataks obtained in the previous year. These last figures are the same as those quoted in paragraph 182 of last year's report They are slightly less than those quoted by Mr. Jellicoe in Appendix IX. The difference is accounted for by the drying of the rubber on its way to Calcutta. The figures quoted now and in the body of the report (paragraph 182) of last year, were the actual weights of rubber sold.

176. The average yield per tree in rubber and in money, as compared with the five previous years, was as follows:

	1882-83. Average yield per tree in rubber.		1883-84 Average yield per tree in rubber.		1884-85. Average yield per tree in rubber.		1885-86. Average yield per tree in rubber.		1886-87. Average yield per tree in rubber.		1887-88. Average yield per tree in rubber	
	S. Ch.	Rs. A. P.	S. C.	Rs. A. P.	S. C.	Rs. A. P	S. C.	Rs. A. P.	S. C.	Rs. A. P.	S. C.	Rs. A. P.
Trees Nos. 1 to 50	4 4	8 10 10	1 1	0 13 9	2 5	3 9 0	3 4	6 11 8	1 0	2 8 4	0 12	1 3 1
" " 51 to 56	....	.....	....	.....	12 10	17 10 5	....	.....	....	.....	....	.....
" " 51 and 52	....	.....	....	.....	....	.....	5 13	12 0 6	....	.....	....	.....
" " 55 " 56	....	.....	....	.....	....	.....	....	.....	3 3	8 0 7	....	.....
" " 53 and 54	....	.....	....	.....	....	.....	....	.....	....	.....	4 8½	7 3 1½

177. These figures show that the average yield per tree of the 44 which remain out of the 50 trees first selected, has been less than in any previous year, and seems to indicate that the trees ought to have rest for a few years before they be tapped again.

178. Mr. Jellicoe has pointed out in his account (Appendix IX.) the great difference there has been in the weight of the crude rubber and that dried from the two trees Nos. 53 and 54, which is very remarkable. The fluctuations in the last three years have also been exhibited in a comparative statement, which shows that there has been a general falling off in the yield, indicating, as already said, that tapping should be suspended for a few years to give the trees rest.

179. The cost of this year's tapping has been Rs. 71-8-0, as compared with Rs. 106-8-0 in the previous year, a great improvement much needed. If calculated according to the rubber obtained it came to Rs. 67 per maund, as compared with Rs. 96 in the previous year.

Besides the cost of tapping, there has been an expenditure of Rs. 8-8 on freight, brokerage, sale commission, &c., making the total expenditure Rs. 80, as compared with an income of Rs. 76-15, or a loss of Rs. 3-1, the net result of the experimental tapping this year.

Removal of produce by consumers and purchasers.

180. The chief outturn of the Government forests in Assam consists of produce removed by purchasers, and is shown in the tabular statement Nos. 54 and 55, attached to this report in full detail.

Changes in forest rules.

181. The changes in the forest rules sanctioned by the Chief Commissioner during the year were the following:—

The removal of timber and other forest produce from all protected forests in Cachar (except North Cachar) and Sylhet without a proper license was prohibited under Section 29, clause (*e*), of the Indian Forest Act.

The fee payable for home consumption permits by ryots in the Jaintia parganas was raised from 8 annas to Re. 1.

The fee to be paid for registering a property mark used for marking timber in the Province of Assam was fixed at Rs. 5.

The quantities of timber and other forest produce which may be removed on a home consumption permit were fixed, and the issue of special home consumption permits by Deputy-Commissioners was permitted, the payment of a fee of 8 annas for a special permit was prescribed.

The meaning of the term "ryots," with respect to the issue of home consumption permits was extended to all persons who hold or cultivate land.

The collecting of duty on all timber brought from beyond the frontier of British India, except Bhutan, or from beyond the Inner Line by the Brahmaputra or any of its tributaries into the valley districts of Assam was authorized from the 1st October 1887, and the rates of duty fixed.

Sadiya and Dibrugarh, in the district of Lakhimpur, were prescribed as forest control stations under the Assam River Rules.

The control over cane and rubber-mahâls in Assam was vested in the Conservator of Forests.

Deputy-Commissioners were permitted to authorize the procuring of timber and other forest produce by ryots from other mauzas and other districts than such in which they might be living, if not procurable in the latter.

Working of the permit system

182. Excepting the above changes, the permit system of working the forests in Assam has remained unchanged. The number of each kind of permit, and the fees realized on them, as compared with the previous year, are shown in Appendix X.

Account of timber and other forest produce removed.

183. The forest produce removed under the home consumption permits and its value are entered in the prescribed Tabular Statements Nos. 54 and 55, and the usual abstract showing what free grants were made to right-holders, such as were granted under concessions by the Local Government, and those granted under executive orders separately is attached to this report as Appendix XI.

184. The total outturn of the forests in Assam, as compared with the previous year, has, in accordance with the orders of the Chief Commissioner, been shown for every district separately in the Appendices XII. and XIII of this report.

185. The following is an abstract statement showing the outturn of timber and other wood in the valley districts, the Gáro, Khási, and Nága Hills, in cubic feet, as compared with the previous year :—

	1886-87.				1887-88.			
	Sál.	First class.	Second-class.	Total.	Sál.	First-class.	Second-class.	Total.
From reserved forests	145,623	22,386	21,125	189,134	252,564	25,865	30,527	308,956
" protected and unclassed State forests	42,738	165,118	346,218	554,074	81,074	115,104	991,147	1,187,325
Total.....	188,361	187,504	367,343	743,208	333,638	140,969	1,021,674	1,496,281

186. The estimated solid cubic contents of boats, poles, dead wood, and firewood, yielded by the forests in the valley districts, the Gáro, Khási, and Nága Hills, was the following, as compared with the previous year:—

	1886-87.					1887-88.				
	Poles.	Boats.	Dead wood.	Fire-wood and char coal.	Total.	Poles.	Boats.	Dead wood.	Fire-wood and char-coal	Total.
From reserved forests	6,879	...	165,208	.....	172,087	3,389	600	154,720	271,791	430,500
" protected and unclassed State forests	9,213	74,349	62,382	.....	145,944	6,723	101,520	42,061	2,257,699	2,408,003
Total	16,092	74,349	227,590	.....	318,031	10,112	102,120	196,781	2,529,490	2,838,503

187. The logs, posts, planks, poles, and firewood yielded by the Government forests in Cachar and Sylhet, and such as were removed from private or imported from foreign forests by purchasers, as compared with the previous year, were as follows:—

	1886-87.					1887-88.				
	Logs and boats.	Posts and planks.	Poles.	Firewood.	Total.	Logs and boats.	Posts and planks.	Poles.	Firewood.	Total.
From Government forests	417,818	7,164	...	30,364	455,346	308,788	1,384	2,796	27,998	340,966
" foreign "	56,205	527	...	1,632	58,364	129,191	193	176	3,256	132,816
" private "	199,907	3,523	...	38,029	241,459	200,189	4,090	...	44,448	248,727
Total.....	673,930	11,214	...	70,025	755,169	638,168	5,667	2,972	75,702	722,509

188. The outturn of Sâl, as shown in the first of the above statements, has been almost doubled, and as this is for the present one of the chief sources of forest revenue, the revival in the export trade of this timber is very satisfactory. A large proportion of this timber has been converted into railway sleepers for the Eastern and Northern Bengal State Railway, quite a new venture on the part of the timber traders in this Province.

There has been a decrease in the outturn of first-class timber, which was almost general all through the Province, and must, partly at any rate, be ascribed to the large increase in the outturn of Sâl.

The large increase in the outturn of second-class timber is due to the more extended manufacture of tea-boxes in the Province, instead of their importation, which prevailed formerly.

The total outturn in timber of all three classes is more than double that of the preceding year.

The outturn in poles and dead wood has been less, the former by 5,980 and the latter by 30,809 cubic feet. The former difference is small and unimportant, the latter is due to dead wood becoming scarce in the more accessible forests. The increase in the outturn of boats by 27,771 cubic feet has to be attributed to the general prosperity of the people having caused an increase in the use of them, both in this Province and Eastern Bengal.

189. The outturn of timber from the Cachar and Sylhet forests has been slightly less in the year under report, which is due to the exceptional activity in the timber trade in the previous year in those districts.

The increase in the outturn of firewood has chiefly occurred in the private forests of Sylhet on account of the stricter control introduced over its removal from the Government forests in that district.

The increase in the outturn of foreign forests has mainly taken place in the imports into Cachar from Manipur, which is attributed by the Divisional Officer to the re-established tranquillity in that country. The outturn of private forests is about the same as in the previous year.

Sale of trees on land allotted for cultivation.

190. There has been a slight increase in the area of forest lands allotted for cultivation; but most people have been more circumspect in their selection and have taken up land with less forest, or less valuable forest on it, than in previous years, which accounts for the decrease in the rate per acre as shown in the following statement. This check on the indifference with which forest land was formerly applied for was one of the objects in view when the taxing of forests standing on land allotted for cultivation was decided upon.

The increase in the area of forest land taken up for cultivation was 2,990 acres, and a corresponding increase took place in the revenue realized on this account, as shown in the following statement :—

Name of division.	Area of forest land allotted for cultivation in acres.				Amount of forest revenue realised and due.				Average amount per acre.			
	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.
					Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Darrang	174	176	2	...	555	345	...	210	3 3 0	1 15 4	.....	1 3 8
Sibsâgar	193	736	543	...	536	1,958	1,222	...	2 12 5	2 10 6	.....	0 1 11
Lakhimpur.....	329	1,100	771	...	1,438	1,184	...	254	4 6 0	1 1 2	.....	3 4 10
Cachar	1,855	2,184	329	...	8,361	1,908	...	6,453	4 8 1	0 14 0	.....	3 10 1
Sylhet.....	2,958	4,303	1,345	...	2,564	10,837	8,273	...	0 13 10	2 8 3	1 10 5	.....
Total	5,509	8,499	2,990	...	13,454	16,232	9,495	6,917	2 7 2	1 14 6	.....	0 8 8

The caoutchouc or rubber trade.

191. The outturn of caoutchouc, or India-rubber, by the Government forests in Assam was 6,563 maunds, which is more than it has been in the last two years. This amount was fixed, as hitherto, by deducting imports from exports.

The yield for the last ten years is given below for ready reference:—

Year	1878-79	1879-80	1880-81	1881-82	1882-83.	1883-84.	1884-85	1885-86	1886-87.	1887-88.
Quantity in maunds.	3,081	5,512	4,374	5,951	4,743	8,150	7,290	5,675	2,277	6,563

The increase in the yield of rubber took place chiefly in the Sibságar and Lakhimpur districts.

192. The value of the Rubber-mahâls in the different districts during the last seven years has been as follows:

	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Goálpára	130	200	.....	.....	.....	.....	.....
Kámrúp	.....	1,610	905	.....	.....	.....	300
Darrang	6,951	21,100	22,100	22,100	22,100	22,100	21,005
Nowgong	765	182	295	280	128	88	69
Lakhimpur	12,900	6,100	10,000	5,080	7,600	11,650	10,600
Cachar.....	1,150	3,000	2,000	1,700	1,000	500	275
Sylhet	.....	.....	.....	.....	.....	250	500
Khási Hills.....	.....	600	600	350	350	400	515

Account of produce removed by purchasers according to divisions
Gáro Hills division

193. The outturn of timber in the Gáro Hills Forest has increased steadily during the last five years, as will be seen from the following table, and is satisfactory:—

Forest.	Description	1883-84		1884-85.		1885-86		1886-87		1887-88.	
		No.	Cubic contents.	No.	Cubic contents.	No.	Cubic contents	No.	Cubic contents	No.	Cubic contents
Reserves	Sâl-trees	...	.....	...	.....	28	840	29	870	157	4,710
"	" logs	...	.....	...	...	23	230	...	.....		.....
Unclassed State forests and waste lands.	Sal-trees	391	.....	131	3,930	93	2,190	197	5,910	618	18,540
	1st class trees ...	404	.....	203	6,090	409	12,270	229	6,570	425	12,750
	2nd " " ...	194	.....	135	4,050	223	6,690	279	8,370	615	18,450
	Dead wood—										
	1st class	...	.....	1,541	15,410	1,756	17,560	1,615	16,150	1,577	15,770
	2nd class	...	.....			180	1,800	225	2,250	268	2,680
	Dugouts	...	.....	911	27,330	1,098	27,450	2,153	64,590	2,236	67,080
Total	.....	...	.....	2,921	56,810	3,790	69,030	4,727	104,710	5,896	139,980.

There was a slight decline in the working cut of dead wood in the year under report. It is supposed to be due to the low rates at which Sâl poles can be had from the private forests in the Goálpára district.

The sales from the zemindary forests managed by Government have on the other hand, decreased, for which the Divisional Officer can assign no reason.

194. The number of the *gurkati* license-sellers was doubled during the year, which, together with a strict supervision over them and several prosecutions, has resulted in an increased sale of 1,881 licenses as follows:—

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
Gáro passes	2,358	2,300	1,388	2,282	2,764	2,899
Foreign "	1,223	2,210	2,073	3,870	4,147	5,893
Total	3,581	4,510	3,461	6,152	6,911	8,792
In Government forests.	3,043	4,029	2,886	5,284	5,678	6,120
Zemindári ditto...	538	481	575	868	1,233	2,672
Total	3,581	4,510	3,461	6,152	6,911	8,792

The steady increase in the sale of these licenses speaks for itself, and proves that the system is well suited to the place and the people.

195. Thirty *gurkati* licenses, worth Rs. 60, were granted free to the Karaibári zemindár.

196. In the Goálpára division the number of trees sold during the year was 5,393, as compared with 2,704 sold in the previous year, which is also very satisfactory. The usual concession granted in former years, of collecting only part of the revenue before the trees are felled, was also made this year to prevent timber-cutters falling into the hands of money-lenders. The balance of revenue due is invariably collected before the timber is allowed to be removed from the sale depôts.

Goálpara division

The following statement shows the proportion in which the trees were obtained from, reserves or from unclassed State forests and waste lands, also the proportion of Sâl to other kinds:—

Forests.	1886 87.					1887-88.				
	Sâl trees	First class trees.	Second-class trees.	Total trees sold.	Cubic contents.	Sâl-trees.	First-class trees.	Second-class trees.	Total trees sold.	Cubic contents.
Reserved forests	2,048	457	44	2,549	76,470	4,507	421	217	5,145	154,350
Unclassed State forests and waste lands.	16	55	84	155	4,650	187	25	35	247	7,410
Total	2,064	512	128	2,704	81,120	4,694	446	252	5,392	161,760

197. The quantities of reeds and thatching-grass which were exported from the Province, as registered at the Dhubri and Fakirganj check-stations during the last five years, has been as follows:—

Whence derived.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
Reeds.	Bundles.	Bundles.	Bundles	Bundles.	Bundles.
Government land	30,678	28,350	75,676	32,030	43,416
Private land	2,706	800	9,300	2,800	20,923
Total Reeds	33,484	29,150	84,976	34,830	64,339
Thatching-grass.	C. Ft.	C. Ft.	C. Ft.	C. Ft.	C. Ft.
Government land	922,222	311,511	613,011	816,388	1,012,551
Private land	121,244	24,666	178,583	488,688	701,101
Total Thatching-grass	1,043,466	336,177	791,594	1,305,076	1,713,652

The revenue collected on reeds during the year has been Rs. 1,357, and on thatching-grass Rs. 2,478. The total forest revenue collected at these stations came to Rs. 4,090, as compared with Rs. 212-13 collected in the previous year

198. In the Kámrúp division the outturn is also much higher than in the previous year. It came to 4,467 trees, as compared with 2,947, sold in 1886-87. The number of Sâl-trees out of the total sold was 4,103, as compared with 2,709 in the previous year, and the proportion used for boats or dugouts was 2,474, the remaining 1,993 being cut either into sleepers or short logs, called *dhooms*; the latter are sawn up afterwards into planks, most of which are used for building country boats.

Kámrúp division.

The outturn of timber from the Khási Hills shared forests, also managed by the Kámrúp Forest Officer, was much less in the year under report. It came to 483 trees only, as compared with 1,311 sold in the previous year, chiefly owing to the fact that the largest firm of timber traders formerly working in those forests have transferred their operations to the Dambu Forest in the Gáro Hills, as being more profitable

The dead wood removed in the year under report in this division was 6,118 pieces, as compared with 10,402 worked out in the previous year. The decrease is owing to this kind of wood having become scarce in the more accessible localities.

199. In the Darrang division no Sâl-trees were sold. The area of Sâl forest is very small, and the locality at a greater distance from the inhabited part of the district than other first-class trees can be

Darrang division

had, which explains this. The sale of other trees has increased both in reserves and unclassed State forests and waste lands, as shown in the following statement:

Forest.	1886-87.					1887-88.				
	Sál-trees.	1st-class trees.	2nd-class trees.	Total trees sold.	Cubic contents	Sál-trees.	1st-class trees.	2nd-class trees	Total trees sold	Cubic contents.
Reserved forests	15	22	275	312	7,800	...	91	584	675	16,875
Unclassed State forests and waste lands ...	...	291	301	592	14,800	...	338	336	674	16,850
Total	15	313	576	904	22,600	...	429	920	1,349	33,725

The sale of second-class trees from reserved forests is more than double of what it was in the previous year. They were chiefly used for the manufacture of tea-boxes. The outturn of dead wood increased from 170 pieces in the previous year to 438 pieces, but cane decreased from 20,658 to 16,400 bundles.

Nowgong division.

200. In the Nowgong division the demand for timber is solely confined to local requirements, which are small. There has been a slight increase in the outturn, which is more due to the better and stricter supervision established now than to the expansion of trade. The tea industry is not large in the Nowgong district, and very little forest produce is purchased by the ordinary inhabitants, since the quantities allowed free are very ample for home consumption, whilst trade is quite in its infancy in this district.

A comparison is made in the following table between the outturn of the year under report and that of 1886-87:—

Forests.	1886-87.					1887-88.				
	Sál-trees	1st-class trees.	2nd-class trees.	Total trees sold.	Cubic contents.	Sál-trees.	1st-class trees.	2nd-class trees.	Total trees sold.	Cubic contents.
Reserved forest	26	18	32	76	2,100	64	41	51	156	4,405
Unclassed State forests and waste land	...	293	1,833	2,126	54,616	...	140	4,145	4,285	58,100
Total	26	311	1,865	2,202	56,716	64	181	4,196	4,441	62,505

Out of the 4,441 trees shown in this statement as sold 350 were converted into boats or dugouts.

The removal of poles and dead wood has been less on account of the more liberal allowances of free timber for home consumption in the year. The number of poles removed was 516, as compared with 2,772 in the previous year, and 2,863 pieces of dead wood, as compared with 4,555 pieces worked out in 1886-87.

Sibságar division.

201. In the Sibságar division there was also but a slight increase of outturn, as very large areas of forests are in the possession of tea-planters, who are almost the only people requiring timber; no large increase is likely to take place within the immediate future. The number of trees sold was 1,454, as compared with 1,006 in the previous year, 288 of which came out of reserves and 1,166 out of unclassed State forests and waste lands. The drift wood from the Dhansiri river came to 170 logs, as compared with 80 secured in the previous year. All the other differences in the outturn are small and unimportant. They are shown clearly in the Tabular Statements Nos. 54 and 55 and Appendices Nos. XII. and XIII.

Lakhimpur division.

202. In the Lakhimpur division there is a small timber trade in tea-boxes, which are made at four different saw-mills, besides those made on the tea plantations themselves. The number of trees sold each year since 1883-84 was as follows, which shows the steady increase in the demand for timber:—

1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
1,436	1,889	2,022	4,474	5,074

The number of trees obtained from protected forests was 398, and that from unclassed State forests and waste lands 4,676.

203. The number of trees sold under the timber concession granted to the Assam Railways and Trading Company, giving them the exclusive right to fell timber within 1½ mile on either side of the Makum Branch line, was 844, of which 72 were first-class and 772 second-class, which can hardly be called an adequate return to Government, justifying the exclusion of everyone else from this large area of about 50 square miles.

204. The value of the rubber-mahál in Lakhimpur was slightly less than in 1886-87, as already stated in paragraph 192 above, and the cane-mahál could not be sold, because the traders had combined to make but a very insufficient bid for the same. A recurrence of this has been prevented in the current year.

Cachar division.

205. In the Cachar division there has been a slight falling off in the outturn of the Government forest, due, as already said, to the exceptional activity in the timber trade in the previous year. It seems an ordinary fluctuation. Full details are given in Appendix XIV. of this report.

The proportion of each of the three classes of timber making up the total outturn from Government forests in Cachar, as compared with the previous year, was as follows:—

	1886-87.	1887-88.
First-class timber	32,428	30,556
Second-class timber	28,544	28,599
Third-class timber	309,112	237,838
Total	370,085	296,993

The above figures for 1887-88 include drift wood, which was formerly excluded.

The quantity of timber exported from Cachar during the year came to 8,845 logs, and the proportions of this which came from Government and foreign forests and that from private forests were the following, as compared with the previous year:—

	1886-87.	1887-88.
From Government and foreign forests	3,894	3,203
From private forests	6,082	5,642
Total	9,976	8,845

This comparison cannot be made in cubic feet, as the private timber is not measured at the forest control stations.

Out of the total outturn of 16,821 logs from Government, foreign, and private forests, which were registered at the Cachar forest control stations, 7,976 logs remained in the Cachar district, and 8,845 were exported, as shown in Appendix XIV.

The outturn of the forests in the North Cachar Hills was registered, as heretofore, at Dyangmukh. It is shown in Appendix XV. These hills are part of the Cachar district, but for convenience of management the control over forest produce removed from them has been transferred to the Nowgong forest division.

Sylhet division.

206. In the Sylhet division there has been a similar falling off in the outturn of timber as in Cachar. It was due to the same cause, *i.e.*, the overstocking of the market in the previous year, or, as the Divisional Officer describes it, the low prices prevailing, which is the same thing, besides which the water in the Langai and Singla rivers is reported to have been unusually low, so as frequently not to have admitted of the floating of timber. The outturn of bamboos has been much larger than in the previous year.

The proportion of each of the three classes of timber making up the total yield of timber from the Government forests, as compared with that of last year, was as follows:—

	1886-87.	1887-88.
First-class timber	13,059	8,876
Second-class timber	3,698	4,063
Third-class timber	39,103	33,702
Total	55,860	46,641

Full particulars as regards the increase and decrease in other forest produce are given in Appendix XIV. of this report.

207. In four of the protected forests Rs. 6,536 were collected, chiefly on firewood and thatching grass, as compared with Rs. 2,731 in the previous year, by the men

appointed for the purpose, to whom 10 per cent. commission are paid on their collections. The amounts collected from each forest were as follows:—

Name of protected forest.	Collection during 1886-87.			Collection during 1887-88.			Increase.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Raghunandan	1,185	12	0	3,713	3	3	2,527	7	3
Taraf	965	2	0	1,640	8	0	675	6	0
Putijuri	.....			350	5	6	350	5	6
Dinarpur	579	12	3	831	15	6	252	3	3
Total	2,730	10	3	6,536	0	3	3,805	6	0

The quantity of Agar-wood collected and removed by the maháldárs was 278 maunds.

208. The forest produce imported from Hill Tippera has increased very much during the year. It was regularly registered, and passes issued at the forest revenue stations of Silua, Maulvi Bázár, and Muchikandi. Pass-fees were levied under Rule V. of the Sylhet River Rules from May until March, and Rs. 3,076 collected, since then the collecting of pass-fees has been suspended until further orders.

Khási and Jaintia Hills division.

209. The outturn of timber from the shared forests of Jirang in the Khási Hills has already been noticed above in the Kámrúp division, since the working of these forests is managed by the Kámrúp Divisional Forest Officer.

The outturn of the Nungkhlao, Nungspung, and Khyrim forests, managed by Khási Seims themselves, has been but small; it consisted of 707 logs, 227 posts, and 277 dugouts.

Free grants of forest produce

210. The great liberality with which the quantity of forest produce ordinarily allowed for home consumption has been fixed, and the further concession that Deputy-Commissioners may grant special permits in addition to the ordinary ones, as well as the new definition of the term "ryots," which now applies to nearly all inhabitants, has had the effect that people availed themselves of this privilege much more than before. The value of the free grants is more than double that in the previous year.

The free grants made by means of home consumption permits and their value is shown in detail in the prescribed Tabular Statements Nos. 54 and 55 attached to this report. The value of them in the different districts was as follows:—

	1885-86. Rs.	1886-87. Rs.	1887-88. Rs.
Gáro Hills	450	310	60
Goálpára	1,684	5,352	55,037
Kámrúp	7,955	3,730	6,610
Darrang	7,010	4,891	9,092
Nowgong	488	6,350	14,776
Sibságar	8,182	9,100	30,493
Lakhimpur	14,179	14,873	3,778
Cachar	1,299	558	202
Sylhet	15,441	6,952	8,867
Khási Hills	.....	5	.....
Total	56,688	53,221	128,915

In the Goálpára district the increase has been more than tenfold, and the Divisional Forest Officer has been asked to explain the reason for this great increase.

211. In addition to the above, there were the free grants made to the Assam Railways and Trading Company, which in the year under report were as follows:—

Description of trees.	No.	Rates. Rs.	Value. Rs.	Purpose for which used. For sleepers.	For buildings.	For other purposes.
First-class trees	1,600	6	9,600	1,600	.....	.....
Second „ „	.....	...	.....	.....	.....	.....
Total	1,600	6	9,600	1,600	.....	.....

Imports and exports of forest produce.

212. The timber imported from Bhutan into Assam is but very little. It was the following during the last five years:—

	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
Logs	80	29	.....	146	1,043
Dugouts	146	30	63	133	684

213. The imports of forest produce into Cachar from Manipur and the Lushai Hills during the year were, as compared with the two previous years, the following:—

	1885-86.	1886-87.	1887-88.
Logs	749	183	2,467
Poles	78	40	41
Bamboos	258,325	280,937	244,050
Canes (bundles)	377	1,805	979
Firewood (maunds)	3,210	.....	.....

214. The imports from Hill Tipperah into Sylhet, as compared with the previous year, have been as follows:—

Forest produce.	1886-87.	1887-88.	Increase.	Decrease.
Logs	1,975	9,902	7,927	...
Agar (maunds)	37	.....	.....	37
Firewood (maunds)	806	1,728	922	...
Bamboos	1,139,907	2,898,040	1,758,133	...
Canes (bundles)	8,652	10,837	2,185	...
Sun-grass (bundles)	94,600	1,000,685	906,085	...
Ekra (bundles)	979	1,248	269	...
Noll	22	.....	.....	22

215. The import of rubber for the last five years into Assam has been the following:—

	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
	Mds.	Mds.	Mds.	Mds.	Mds.
Bhutan	86	20	31	37	50
Towang	248	134	175	267	126
Dafla Hills	221	137	459	86	43
Nága, Mishmi, and Singpho Hills ...	828	287	215	597	498
Lushai Hills	135	224	55	550	210
Manipur	124	...	48	...	...
Total	1,642	802	983	1,597	927

The export of rubber for the last five years by steamer has been as follows:—

	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
	Mds.	Mds.	Mds.	Mds.	Mds.
From Goálpára ...	1,481	588	728	297	221
„ Kámrúp ...	80	100	641	149	182
„ Darrang ...	2,624	2,717	1,440	1,375	493
„ Nowgong ...	1,154	963	1,510	323	554
„ Sibságar ...	684	200	741	197	1,653
„ Lakhimpur ...	3,289	2,752	1,429	1,463	4,115
„ Sylhet	462	110	26	59	35
„ Cachar ...	15	99	8	11	.....
Total ...	9,792	7,529	6,523	3,874	7,253

In addition to this 280 maunds were exported by boat from Cachar and Sylhet, making the total exports of rubber in the year under report 7,533 maunds, as compared with 4,039 maunds in 1886-87.

The result of the enquiry about the export of rubber made from the Steamer Agents, alluded to in paragraph 225 of last year's report, resulted in the quantity shipped in Assam being stated at 4,496 maunds, as compared with the 3,807 maunds registered in Calcutta.

216. The provincial imports and exports of forest produce, as registered at Dhubri on the Brahmaputra and Bhairab Bázár on the Megna river, were the following:—

Name of forest produce.	Denomination.	Registered at Dhubri.				Registered at Bhairab Bázár.			
		Imports.		Exports.		Imports.		Exports.	
		By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.
Timber	No.	...	2,666	351,361	2	352	902	2,074	...
Caoutchouc	Mds.	...	43	.....	7,218	...	...	280	35
Lac { Stick	"	...	...	233	316	...	4	.....	11
Lac { Shell	"	...	4	9,451	9,993	...	...	.....	...
Lac-dye	"	...	...	.....	.....	...	...	.....	...
Bamboos	No.	...	...	20,917	.....	...	...	739,000	...
Thatching-grass	c.ft.	...	...	1,713,652	.....	...	...	.....	...
Reeds	bdls.	...	...	61,339	.....	...	...	.....	...
Canes	"	...	480	268,875	12,800	...	...	21,085	...

The imports of timber consist almost entirely of tea-boxes. They are more than in the previous year, but still insignificant as compared with the exports, and more so if compared with the total outturn of the timber from the Assam forests.

The following forest produce registered at Dhubri as exported was used either at the station of Dhubri itself or in the district:—

Timber...	14,207 logs.
Bamboos	20,917
Canes	10,560 bundles.
Charcoal	42 maunds.

The export of timber from the Brahmaputra Valley has been less by 17,406 pieces than in the previous year, which is accounted for mainly by the fact that the sale of timber from the Bijni estate was interdicted during the latter part of the year. The export from Cachar and Sylhet has increased by 746 pieces.

The export of bamboos decreased in the Brahmaputra Valley by 4,903, and increased from Cachar and Sylhet by 212,000.

The export of cane from the Brahmaputra Valley decreased by 56,649 bundles, whilst from Sylhet and Cachar it increased by 15,575.

The export of thatching-grass from the Brahmaputra Valley increased by 408,576 cubic feet, and the export of reeds increased by 29,509 bundles; no thatching-grass and reeds are exported from Cachar and Sylhet.

CHAPTER V.—Financial Results.

General.

217. The forest revenue collected during the year has been Rs. 55,301 more than in the previous year, chiefly on account of the revival of the trade in Sâl exported to Bengal from the Gáro Hills, Goálpára, and Kámrup divisions, and a large increase in sales of trees on land allotted for cultivation in Sylhet.

218. The forest expenditure has been more by Rs. 14,604 than in the previous year, of which Rs. 6,837 were the increase under "A Conservancy and works" and Rs. 7,767 under "B. Establishments." The former is accounted for chiefly by the purchase of elephants, stores, and the payment of lawyers and arbitrators' fees, charged in the Direction division, and the latter by the promotion of officers and the pay of the additional officer posted to Assam.

219. The financial results are a surplus of Rs. 40,420, the best attained since 1882-83.

220. The value of the free grants made during the year amounted to Rs. 1,41,559, or Rs. 83,014 more than in the previous year.

221. The revenue collected by the Forest Department and such as was collected by the Revenue Department is shown in Appendix XV.

222. The Tabular Statement No. 62 of this report shows the receipts and expenditure arranged under the three great heads "I.—Departmental timber operations," "II.—Other revenue," and "III.—Formation, protection, and improvements of forests." The totals under these heads, as compared with those of the previous year, were the following:—

		1886-87.		1887-88.	
		Receipts.	Charges.	Receipts.	Charges.
		Rs.	Rs.	Rs.	Rs.
I.	Departmental timber operations ...	2,612	2,765	3,772	4,341
II.	Other revenue	209,399	81,186	2,63,540	97,811
III.	Formation, protection, and improvement of forests.	.....	1,28,336	.....	1,24,740
	Total	2,12,011	2,12,287	2,67,312	2,26,892

The distribution of the receipts and expenditure under the above three heads is that under head "I.—Departmental timber operations." All receipts under the budget main heads I. and III. and charges under A I. and A III. were included.

The amount under "II.—Other revenue" includes all the receipts not shown under head I., and charges under the budget heads AII., IV., V., IX., one quarter of VI, and half of "B.—Establishments."

The amount shown under head "III.—Formation, protection, and improvement of forests" includes the charges under AVII., VIII., three-quarters of VI., and half of "B.—Establishments."

223. The following table shows the forest revenue collected during the year under the main heads of service as compared with that of the previous year:—

Revenue.

Revenue budget heads.	1886-87.	1887-88.	Increase.	Decrease.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency	386 1 9	1,974 0 1	1,587 14 4	.....
II.—Ditto by consumers and purchasers	1,83,060 0 9	2,26,494 13 10	43,434 13 1	.....
III.—Drift and waif-wood and confiscated forest produce	2,225 3 6	1,798 6 9	.....	426 12 9
IV.—Revenue from forests not managed by Government...	10,628 8 8	13,336 8 1	2,707 15 5	.....
V.—Miscellaneous	15,710 14 1	23,707 15 3	7,997 1 2	.....
Total	2,12,010 12 9	2,67,311 12 0	55,727 12 0	426 12 9

From the above figures it will be seen that there has been an increase under every head but "III.—Confiscated, drift and waif-wood," and this decrease occurred entirely in the Gáro Hills and Kámrúp divisions. In the former less drift-wood was collected in the Someswari river; and as regards the Kámrúp division the officer in charge has furnished no explanation of the falling off in receipts under this head: it is but small.

The chief increase took place under "II.—Timber and other produce removed from the forests by consumers and purchasers." It is mainly due, as already stated, to the increase in the export of Sâl from Lower Assam and the larger sales of trees on land allotted for cultivation in Sylhet.

There were also increased receipts under this head in the Sibságar and Lakhimpur divisions, counterbalanced, however, by a considerable falling off in receipts under that head in Cachar.

The increase under "IV.—Revenue from forests not managed by Government" took place chiefly in Cachar, on account of the revival of the export of timber from Manipur. The increase under "V.—Miscellaneous" in Sylhet took place in consequence of fees having been collected for issuing passes for the timber imported from Hill Tippéra.

224. The following statement shows the expenditure during the year under report, as compared with that of the previous year:—

Expenditure.

Budget head.	1886-87.	1887-88.	Increase.	Decrease.
A.—CONSERVANCY AND WORKS.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency.	2,686 4 0	4,226 15 7	1,540 11 7	.....
II.—Timber and other produce removed from the forests by consumers and purchasers.	6,103 13 4	8,452 9 0	2,348 11 8	.....
III.—Drift and waif wood and confiscated forest produce.	79 6 0	114 6 7	35 0 7	.....
IV.—Revenue from forests not managed by Government	.....	.....	.....	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government.	.....	.....	.....	.....
VI.—Live and dead stock	12,940 2 1	14,657 10 10	1,717 8 9	.....
VII.—Communications and buildings	11,780 7 2	9,907 6 11	.....	1,873 0 3
VIII.—Demarcation, improvement, and extension of forests.	40,290 12 5	35,871 2 4	.....	4,419 10 1
IX.—Miscellaneous	5,287 1 0	12,775 3 1	7,488 2 1	.....
Total of A.—Conservancy and Works	79,167 14 0	86,005 6 4	13,130 2 8	6,292 10 4
B.—ESTABLISHMENTS.				
I.—Salaries	1,06,123 15 9	1,13,808 11 6	7,684 11 9	.....
II.—Travelling allowances	22,697 9 1	22,446 5 1	.....	251 4 0
III.—Contingencies	4,297 15 11	4,631 7 11	333 8 0	.....
Total of B.—Establishments	1,33,119 8 9	1,40,886 8 6	8,018 3 9	251 4 0
Grand Total of Expenditure	2,12,287 6 9	2,26,891 14 10	21,148 6 5	6,543 14 4

The increase under "A I.—Timber and other produce removed from the forests by Government agency" is due to the timber operations which had to be carried on for part of the year in the Gáro Hills.

The increase under " A II.—Timber and other produce removed from the forests by consumers or purchasers, " is the natural consequence of the increased timber operations carried on in the Gáro Hills, Goálpára, Kámrúp, and Sylhet divisions, which required additional establishments for control.

The increase under " A VI.—Live and dead stock " is due to the purchase of elephants, as already explained.

The decrease under " A VII.—Communications and buildings" and " A VIII.—Demarcation, improvements, and extensions of forest," is accounted for by the efforts made to economize wherever practicable.

The increase under " A IX.—Miscellaneous" is due entirely to a refund of revenue made in the previous year, as ordered by the Chief Commissioner.

The increase under " B.—Establishments—I. Salaries " is accounted for by the promotion of officers; the other differences are small and unimportant.

Surplus and deficit according to divisions

225. The following statement shows the receipts and expenditure in the different divisions and their respective surplus or deficit :—

Name of division.	Receipts.	Expenditure.	Surplus.	Deficit.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Direction	3 3 4	36,751 11 3	.....	36,748 7 11
Working Plans	1,212 0 0	11,708 13 9	.....	10,496 13 9
Gáro Hills	23,652 5 2	32,044 4 1	.....	8,391 14 11
Goálpára	39,852 0 2	21,672 5 10	18,179 10 4	.....
Kámrúp	46,352 1 3	25,715 12 0	20,636 5 3	.....
Darrang	29,504 10 3	19,962 9 3	9,542 1 0	.....
Nowgong	8,618 7 11	7,723 12 9	894 11 2	.....
Sibságar	11,686 8 2	25,861 14 3	.....	14,175 6 1
Lakhimpur	29,249 2 0	20,380 5 0	8,868 13 0	.....
Cachar	39,408 1 6	14,449 15 1	24,958 2 5	.....
Sylhet	36,117 8 9	8,130 12 1	27,986 12 8	.....
Khási and Jaintia Hills.	1,655 11 6	2,489 11 6	.....	834 0 0
Total	267,311 12 0	226,891 14 10	111,066 7 10	70,646 10 8

The receipts in the Direction division are, as hitherto, next to nothing, and in the Working Plans division it is the same. The comparatively large amount shown for the latter in the above statement is the value of mathematical instruments returned into store.

In the Gáro Hills division the receipts have increased by Rs. 6,897, but expenditure has also increased by Rs. 4,063, still leaving a deficit of Rs. 8,392.

In the Goálpára division the receipts are more than double, whilst the expenditure was about the same as in the previous year, resulting in a surplus of Rs. 18,179, instead of a deficit of Rs 2,612, as was the case in the previous year.

In the Kámrúp division receipts are more by Rs. 9,391, whilst expenditure was less by Rs. 1,406, increasing the surplus to Rs. 20,636, as compared with Rs. 9,838 in the previous year.

In the Darrang division the receipts were Rs. 254 more, and the expenditure Rs. 3,146 less, increasing the surplus to Rs. 9,542, as compared with Rs. 6,140 in the previous year.

In the Nowgong division the receipts increased by Rs. 3,110, whilst expenditure decreased by Rs. 154, leaving a surplus for the first time since the division was separated from that of Darrang of Rs. 894

In the Sibságar division receipts have risen from Rs. 8,787 to Rs. 11,686, but expenditure has risen also by Rs. 7,106, which latter was due, however, as already mentioned, to a refund of revenue of Rs. 7,000 ordered by the Chief Commissioner. This also increased the deficit to Rs. 14,175, as compared with Rs. 9,967 in the previous year.

In the Lakhimpur division receipts increased by Rs. 1,986, whilst expenditure decreased by Rs. 1,743, thus making the surplus Rs. 8,863, as compared with Rs. 5,139 in 1886-87.

In the Cachar division receipts have fallen off by Rs. 5,021 and expenditure was less by Rs. 910, reducing the surplus of the previous year, Rs. 29,068, to Rs. 24,958 in the year under report.

In the Sylhet division receipts increased by Rs. 16,305, whilst expenditure only rose by Rs. 781. This increased the surplus to Rs. 27,986, as compared with Rs. 12,462 in the year before.

In the Khási Hills receipts have fallen off by Rs. 3,107, but expenditure was also less by Rs. 489; the deficit was Rs. 834.

Value of stock at the end of the year.

226. The value of live and dead stock at the close of the year was Rs. 1,21,545 as compared with Rs. 1,36,006 at the close of the year before, or Rs. 11,461 less.

Outstanding revenue

227. The amount of revenue outstanding at the close of the year, as shown in Statement No. 60, was Rs. 86,302, or Rs. 34,193 more than at the close of the previous year.

CHAPTER VI.—General Remarks.

Establishments.

228. No change took place during the year in the controlling and executive staff of the Forest Department in Assam

The Conservator had privilege leave for 2 months and 28 days, with effect from 20th June 1887, and Mr J. T. Jellicoe officiated for him during that time.

Mr. A. J. Mein officiated as Deputy-Conservator, second grade, Mr. C. G. D. Fordyce officiated as Deputy-Conservator, third grade, and Mr. D P. Copeland as Deputy-Conservator, fourth grade, from the 20th of June for 2 months and 28 days in consequence.

Mr. C. G. D. Fordyce and Mr. F. S. Barker officiated as Deputy-Conservators, fourth grade, the former with effect from the 24th March 1887, and the latter from the 11th of April until the close of the financial year.

Mr. T. J. Campbell officiated as First-grade Assistant-Conservator from the 21th March 1887 until the close of the financial year.

Mr. C. P. Fisher, Assistant-Conservator of Forests, third grade, had three months' examination leave granted him, with effect from the 28th June 1887.

Mr. H. G Young, Assistant-Conservator, second grade, passed during the year the required examination in the Land Revenue system, and Babu Tara Kisor Gupta, Sub-Assistant-Conservator, passed in Forest Law.

Babu Kripa Nath De was promoted from the sixth to the fifth grade of Forest Rangers.

Conservator's Tour.

229. The Conservator left head-quarters on the 17th of November 1887, and returned on the 30th April 1888.

The number of days spent in each forest division was as follows:—

Gáro Hills	8
Goálpára	6
Kámrúp	19
Darrang	18
Nowgong	9
Sibságar	26
Lakhimpur	18
Cachar	10
Sylhet	22
Khási Hills	30

Services of Officers.

230. Mr. J. T. Jellicoe was in charge of the Darrang division during the whole year except the two months and 28 days he officiated as Conservator, and whilst in charge of the Working Plans division; he was absent from head-quarters for 166 days

Mr. A. J. Mein was in charge of the Kamrup division for the whole year, and travelled for 186 days.

Mr. C. G. D. Fordyce has had charge of the Lakhimpur division during the whole year; he travelled for 145 days.

Mr. F. S. Barker was in charge of the Sibsagár division during the whole year; he was absent from head quarters for 219 days.

Mr. D. P. Copeland was in charge of the Goálpara division during the whole year, and spent 181 days away from head-quarters.

Mr. T. J. Campbell was in charge of the Gáro Hills division during the whole year, and from the 1st to the 15th of April 1887 he was also in charge of the Working Plans division; he travelled for 258 days in the year.

Mr. H. G. Young was in charge of the Cachar division throughout the year; he travelled for 120 days.

Mr. C. P. Fisher was attached to the Working Plans division from the 1st to the 15th of April 1887, when he received charge and kept it, except for the three months he had examination leave; he has been in the field for 181 days out of the nine months he was on duty.

Mr. J. C. Kelly was attached during the whole year to the Gáro Hills division, and had charge of the Northern Range for seven months in the year; he was absent from head-quarters for 208 days during the year.

Babu Jogesvar Sur was in charge of the Nowgong division during the whole year, and had besides this charge of the Darrang division during the time Mr. Jellicoe officiated as Conservator; he travelled for 209 days in the year.

Babu Tara Kisor Gupta was in charge of the Sylhet division during the whole year; he travelled for 158 days.

ANNUAL FORM No. 49.

Forest Department, Assam.—Area of Classed and Unclassed State Forests and Waste Lands, 1887-88.

Division.	Range.	Civil district or territory	Name of forest.	Area on 1st April 1887.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1888.		Number and date notification of adction or transfer.
				Acres.	Equivalent in square miles	Acres.	Acres.	Acres.	Equivalent in square miles.	
			A.—Classed State Forests and Waste Lands.							
			(a)—*Reserved Forests.*							
Gáro Hills	Northern Range	Gáro Hills District	Dibru Hill	6,080	9	.....	.....	6,080	9	
"	" "	" "	Jinari	6,640	10	.....	.....	6,640	10	
"	" "	" "	Chima and Bangshi	8,680	14	.....	.....	8,680	14	
"	" "	" "	Dhima	5,760	9	.....	.....	5,760	9	
"	" "	" "	Dilma	1,120	2	.....	.....	1,120	2	
"	" "	" "	Rajasimla	4,800	7	.....	.....	4,800	7	
"	" "	" "	Ikiek	1,280	2	.....	.....	1,280	2	
"	" "	" "	Darugiri	2,283	4	(a)165	.....	2,448	4	
"	" "	" "	Rongrengiri	8,480	13	(a)380	.....	8,860	14	
"	" "	" "	Dambu	4,364	7	.....	.....	4,364	7	
"	" "	" "	Songsak	9,280	15	.....	(a) 1,275	8,005	13	
"	Southern "	" "	Emangiri	2,080	3	.....	.....	2,080	3	
"	" "	" "	Rewak	1,280	2	.....	.....	1,280	2	
"	" "	" "	Siju	1,280	2	.....	.....	1,280	2	
"	" "	" "	Bolsalgiri	640	1	.....	.....	640	1	
"	" "	" "	Tura	480	1	.....	.....	480	1	
"	" "	" "	Bagmara	12,320	19	.....	.....	12,320	19	
"	" "	" "	Angratoli	.....	.....	9,138	.....	9,138	14	No. 3, dated 26th January 1888.
			Total	76,847	120	9,683	1,275	85,255	133	
Goálpára	Eastern "	Goálpára "	Bijni Duár	83,564	131	.....	(a) 6,124	77,440	121	
"	" "	" "	Sidli	43,757	68	.....	.....	43,757	686	
"	" "	" "	Bengtol and Darogaon	7,470	12	.....	.....	7,470	12	
"	" "	" "	Bhuineswar Hills	4,033	6	.....	.....	4,033	6	
"	" "	" "	Bhur	3,855	6	.....	.....	3,855		

BENGAL SECRETARIAT

ANNUAL FORM No. 49.—(*Continued.*)

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st April 1887.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1888.		Number and date of notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Goálpára	Eastern and western range	Goálpara district	Chirang Duár No. I	69,203	108	.....	.....	69 203	108	
"	Western range	" "	Sankos	.....	.....	28,800	.....	28,800	45	No. 13, dated the 24th March 1889.
"	" "	" "	Muktaigaon	.....	.....	3,200	.....	3,200	5	
"	" "	" "	Chirang Daur No. II	90,643	142	.....	.....	90,643	142	
"	" "	" "	Ripu Duár	41,632	65	.....	.....	41,632	65	
"	" "	" "	Jengasi Charaidaka	1,730	3	.....	.....	1,730	3	
"	" "	" "	Attabari	9,180	14	.....	.....	9,180	14	
"	" "	" "	Panbari and Pechadaveri	3,290	5	.....	.....	3,290	5	
"	Guma	" "	Guma	15,776	25	.....	.....	15,776	25	
			Total	374,133	585	32,000	6,124	400,009	625	
Kámrúp	Kulsi "	Kámrúp "	Barduar	15,896	25	.....	.....	15,896	25	
"	" "	" "	Pantan	21,910	34	.....	.....	21,910	34	
"	" "	" "	Kulsi plantation	3,680	6	.....	.....	3,680	6	
"	" "	" "	Milmillia	3,610	6	.....	.....	3,610	6	
"	" "	" "	Mayang	4,800	7	.....	.....	4,800	7	
"	" "	" "	Chhaygaon	2,705	4	.....	.....	2,705	4	
"	Jirang "	" "	Mataikhar	2,240	4	.....	.....	2,240	4	
"	Rani "	" "	Jara	1,037	2	.....	.....	1,037	2	
"	" "	" "	Rani	11,035	17	.....	.....	11,035	17	
"	" "	" "	Kawasing	3,570	6	.....	.....	3,570	6	
"	Singra "	" "	Sinla Hills	317	.....	.....	.....	317	.....	
"	" "	" "	Dumpara	497	1	.....	.....	497	1	
"	" "	" "	Khaksi, Sikrabura Hill	2,530	4	.....	.....	2,530	4	
"	" "	" "	Ghoraputa	120	.....	.....	.....	120	.....	
"	" "	" "	Khatkhati Hills	644	1	.....	.....	644	1	
"	" "	" "	Taraibari	806	1	.....	.....	806	1	
"	" "	" "	Garubaldha	240	.....	.....	.....	240	.....	
"	" "	" "	Khurkhuri	149	.....	.....	.....	149	.....	

"	"	"	"	Sursuria Hills	970	2			970	2	
"	"	"	"	Gizang	930	1			930	1	
"	"	"	"	Jaipur	774	1			774	1	
"	"	"	"	Baradobha	1,190	2			1,190	2	
"	"	"	"	Nampathar	640	1			640	1	
"	"	"	"	Borjuli	1,120	2			1,120	2	
"	Northern "	"	"	Hajo	243				243		
				Total	81,653	127			81,653	128	
Darrang	Western "	Darrang "	"	Khalingduar	6,240	10			6,240	10	
"	" "	"	"	Addition to Khalingduar	6,972	11			6,972	11	
"	Central "	"	"	Balipara	56,224	88			56,224	88	
"	" "	"	"	Charduar	64,141	100			64,141	100	
"	" "	"	"	Bhamaraguri	386	1			386	1	
"	" "	"	"	Garumari	205				205		
"	" "	"	"	Singri Hill	1,200	2			1,200	2	
"	Eastern "	"	"	Nowduar	52,480	82			52,480	82	
				Total	187,848	294			187,848	294	
Nowgong	Western "	Nowgong "	"	Kholahat	1,878	3			1,878	3	
"	" "	"	"	Second addition to Kholahat			14,970		14,970	23	No. 63, dated 25th November 1887.
"	Eastern "	"	"	Rongkhong	6,339	10			6,339	10	
"	" "	"	"	Sonaikusi	10,754	17			10,754	17	
"	" "	"	"	Doboka	520	1			520	1	
"	" "	"	"	Addition to Doboka			28,494		28,494	45	No. 65, dated 13th December 1887.
"	" "	"	"	Diju	5,742	9			5,742	9	
"	" "	"	"	Suang	1,924	3			1,924	3	
"	" "	"	"	Bamuni	499				499	1	
				Total	27,656	43	43,464		71,120	111	
Sibságar	Sibságar "	Sibságar "	"	Diroi	11,773	18		(b) 40	11,733	18	
"	" "	"	"	Abhoipur	16,281	25			16,281	25	
"	" "	"	"	Sola	1,661	3	(a) 117		1,778	3	
"	Jorhát "	"	"	Holangapar	4,892	8	(a) 20		4,912	8	
"	" "	"	"	Desai	6,853	11	(c) 59		6,912	11	
"	Golághát "	Nága Hills "	"	Nambor	249,312	390			249,312	390	
"	" "	"	"	Mikir Hills	51,840	81			51,840	81	
"	" "	"	"	Upper Daigurung	5,312	8			5,312	8	
"	" "	"	"	Lower "	5,120	8			5,120	8	
"	" "	"	"	Kalioni			51,840		51,840	81	No. 47. dated 5th August 1887.
"	" "	"	"	Diphu			42,080		42,080	66	No. 25, dated 13th April 1887.
"	" "	"	"	Rengma			34,400		34,400	54	
				Total	353,044	552	128,516	40	481,520	752	
Lakhimpur	Dibrugarh "	Lakhimpur "	"	Dibingmukh	13,747	21			13,747	21	
"	" "	"	"	Jokai			11,858		11,858	19	No. 32, dated 27th May 1887.
"	North Lakhimpur Range.	"	"	Bhorolowah			5,280		5,280	8	No. 48, dated 5th August 1887.
"	" "	"	"	Kuddum			13,626		13,626	21	No. 8, dated 20th February 1888.
"	Makum Range	"	"	Upper Dehing			148,691		148,691	232	No. 12, dated 23rd March 1888.
				Total	13,747	21	179,455		193,202	302	

ANNUAL FORM No. 49.—(*Continued.*)

Division.	Range.	Civil district or territory.	Name of forest	Area on 1st April 1887.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1888.		Number and date of notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres	Equivalent in square miles	
Cachar	Sonai range	Cachar district	Upper Juri	15,360	24	.....	.....	15,360	24	
"	" "	" "	Lower "	8,960	14	.....	.....	8,960	14	
"	" "	" "	Barak	42,880	67	.....	.....	42,880	67	
"	" "	" "	Sonai	11,520	18	.....	.....	11,520	18	
"	" and Matijuri Range	" "	Inner Line	325 760	509	.....	.....	325,760	509	
"	Matijuri range	" "	Katakhal	51,200	80	.....	.....	51,200	80	
"	" "	" "	Dhalsewari	21,120	33	.....	.....	21,120	33	
			Total	476,800	745	.....	.....	476,800	745	
Sylhet	Kanairghat	Sylhet "	Langai and Singla	108,800	170	.....	.....	108,800	170	
			Total	108,800	170	.....	.....	108 800	170	
Khási and Jaintia Hills.	Jowai	Khasi and Jaintia Hills district.	Saipung	32,000	50	.....	.....	32,000	50	
			Total	32,000	50	.....	.....	32,000	50	
			Grand Total	1,732,528	2,707	393,118	7,439	2,118,207	3,310	
			(b) Protected Forests.							
Kámrup	Singra Range	Kámrup district	Jharikburi	1,235	2	.....	.....	1,235	2	
"	" "	" "	Bura Gohain	620	1	.....	.....	620	1	
"	" "	" "	Mogakbal	180	....	.....	.....	180	.....	
			Total	2,035	3	.....	.....	2,035	3	
Sibságar	Sibságar "	Sibságar "	Panidehingia	19,200	30	.....	.....	19,200	30	
			Total	19,200	30	.....	.....	19,200	30	
Lakhimpur	North-Lakhimpur Range	Lakhimpur "	Bharalwah	5,280	8	.....	5,280	.....	.....	No 48, dated the 5th August 1887
"	" "	" "	Kuddum	15,866	25	.....	13,620	2 240	3	" 8, dated the 20th February 1888.
"	Dibrugarh "	" "	Parapara	26,720	42	.....	.....	26,720	42	
"	" "	" "	Jokai	12,954	20	.....	11,858	1,096	2	" 32, dated the 27th May 1887.
"	Makum "	" "	Solaguri	68,122	106	.....	.....	68,122	106	
"	" "	" "	Upper Dehing	159,684	236	.....	148,691	1,993	3	" 12, dated the 23rd March 1888.
			Total	279,626	437	.....	179,455	100,171	156	

				North Cachar Hills.						
Cachar	North Cachar	Cachar	Kapili Diyang	191,200	299	.....	.....	191,200	299	
	"	"	Diyang Mati	54,080	84	.....	.....	54,080	84	
	"	"	Mupa Mahur	20,960	33	.....	.....	20,960	33	
	"	"	Langting Mupa	58,560	92	.....	.....	58,560	92	
			Total	324,800	508	.....	.....	324,800	508	
Sylhet	Patharkandi	Sylhet	Raghunandan Hills	33,920	53	.....	(d)1,327	32,593	51	
	"	"	Tarap Hills	37,760	59	.....	.....	37,760	59	
	"	"	Putijuri Hills	40,960	64	.....	.....	40,960	64	
	"	"	Dinarpur	4,480	7	.....	(b)20	4,460	7	
	"	"	Patharia	35,442	55	.....	(d)2,976	32,466	50	
	"	"	Dewalia	5,760	9	(b)20	.....	5,780	9	
			Total	158,322	247	20	4,323	154,019	240	
			Grand Total	783,983	1,225	20	189,107	594,896	930	
			(b). Unclassed State Forests and Waste Land.							
Goálpára	.....	Goálpára district	Within revenue limits	59,259	93	(a)6,124	32,000	33,383	52	No. 13, dated 24th March 1888.
Kámrúp	.....	Kámrúp "	" " "	319,461	499	.....	.....	319,461	499	No. 63, dated 25th November 1887.
Darrang	.....	Darrang "	" " "	119,844	187	.....	(d)176	119,668	187	No. 65, dated 13th December 1887.
Nowgong	.....	Nowgong "	" " "	200,695	314	.....	43,464	157,231	246	
Sibságar	.....	Sibságar "	" " "	250,398	391	.....	(e)892	249,506	390	
Lakhimpur	.....	Lakhimpur "	" " "	1,328,311	2,075	.....	(d)1,100	1,327,211	2,074	
Cachar	.....	Cachar "	" " "	43,151	67	.....	(d)2,184	40,967	64	
Sylhet	.....	Sylhet "	" " "	8,000	13	.....	.....	8,000	12	
Gáro Hills	.....	Gáro Hills "	Beyond revenue limits	147,153	230	(a)1,275	(f)9,683	138,745	217	No. 3, dated 26th January 1888.
Lakhimpur	.....	Lakhimpur "	" " "	929,920	1,453	.....	.....	929,920	1,453	
Cachar	.....	Cachar "	" " "	135,040	211	.....	.....	135,040	211	
Khási and Jaintia Hills.	.....	Khási and Jaintia Hills district.	" " "	64,000	100	.....	.....	64,000	100	No. 25, dated 13th April 1887.
Nága Hills	.....	Nága Hills "	" " "	315,328	493	.....	128,320	187,008	292	No. 47, dated 15th August 1887.
			Total	3,920,560	6,126	7,399	217,819	3,710,140	5,797	
			Grand Total	6,437,071	10,058	490,537	414,365	6,423,243	10,037	

(a) Re-survey.
(b) Rectification.
(c) 19 owing to re-survey and 40 on account of rectification.

(d) Allotted for cultivation.
(e) 156 added to reserves on account of re-survey and 738 allotted for cultivation.
(f) 9,138 declared reserves and 545 added to reserves on account of re-survey.

FORM No. 50.

FOREST DEPARTMENT, ASSAM.—PROSECUTIONS FOR BREACHES OF FOREST RULES DURING 1887-88.

Forest division and civil district.	Cases pending from 1886-87.	New cases of the year.					Total cases.	Disposed of during the year						Cases pending at close of year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Gáro Hills division— Gáro Hills district	1	....	5	....	....	5	6	5	10	1	1	6	11	....
Goálpára division— Goálpara district	1	....	....	....	5	5	6	4	13	2	2	6	15	....
Kámrúp division— Kámrúp district	1	1	3	....	2	6	7	6	24	1	1	7	25	....
Darrang division— Darrang district	....	....	3	....	....	3	3	3	27	....	....	3	27	....
Nowgong division— Nowgong district	1	3	23	....	....	26	27	12	18	2	8	14	26	13
Sibságar division— Sibságar district	1	....	11	....	....	11	12	9	18	3	4	12	22	....
Lakhimpur division— Lakhimpur district	1	....	....	....	10	10	11	9	14	2	2	11	16	....
Cachar division— Cachar district	4	....	5	....	1	6	10	6	9	3	4	9	13	1
Sylhet division— Sylhet district	2	....	56	....	....	56	58	34	87	22	60	56	147	2
Khási and Jaintia Hills division— Khási and Jaintia Hills district	1	4	6	....	2	12	13	9	17	4	9	13	26	....
Total	13	8	112	....	20	140	153	97	237	40	91	137	328	16

FORM No. 51.

FOREST DEPARTMENT, ASSAM.—AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1888,—TO ACCOMPANY REPORT FOR 1887-88.

Division.	Forest tracts.	Year in which protection commenced.	Area actually protected up to 15th June 1887.	During dry season of 1888.			Cost during the season.
				Area attempted to be protected.	Failures.	Actually protected.	
	GÁRO HILLS DISTRICT.						Rs.
Gáro Hills	Damba	1887-88	.....	4,364	76	4,288	67
	Darugiri	"	.....	2,448	.....	2,448	25
	Total	.....	.....	6,812	76	6,736	92
	GOÁLPÁRA DISTRICT.						
Goálpára	Silli	1876-77	43,712	43,757	105	43,652	1,862
	Guma	"	15,776	15,776	112	15,664	1,749
	Panbari-Pechadanvori	1875-76	3,150	3,290	.....	3,290	95
	Bengtol Darogaon	1886-87	7,000	7,470	200	7,270	70
	Bhuneswar Hill	"	5,000	4,033	42	3,991	107
	Muktaigaon	1887-88	.....	3,200	30	3,170	81
	Total	.....	72,638	77,526	489	77,037	3,464
	KÁMRÚP DISTRICT.						
Kámrúp	Bardjuar	1873-74	14,400	14,400	.....	14,400	541
	Pantan	.....	11,000	14,000	.....	14,000	288
	Kulsi	.....	2,337	2,349	.....	2,349	761
	Milmillia	1874-75	2,410	2,410	.....	2,410	129
	Mayang Hill	1882-83	4,800	4,800	.....	4,800	38
	Chhaygaon	1886-87	2,500	2,500	.....	2,500	59
	Rani — Mayang block	1882-83	6,000	6,000	9	5,991	52
	Rani — Mairakanda "	.....	4,400	4,400	.....	4,400	60
	Jarasal	1873-74	820	820	.....	820	90
	Kawasing	1882-83	3,260	3,260	.....	3,260	117
	Matakhar	1873-74	2,000	2,000	.....	2,000	185
	Simla Hill	1882-83	300	300	.....	300	10
	Dumpara	.....	450	450	.....	450	15
	Khaksi Sikraburu	.....	2,500	2,600	.....	2,500	70
	Ghoraputa	.....	100	100	.....	100	5
	Khátkhati	.....	640	640	.....	640	16
	Taraibari	.....	640	640	.....	640	16
	Garubaldha	.....	200	200	.....	200	9
	Khurkhuri	.....	140	140	.....	140	7
	Bursuria	.....	900	900	.....	900	35
	Total	.....	59,797	62,809	9	62,800	2,503
	DARRANG DISTRICT.						
Darrang	Balipara	1873-74	4,570	4,570	66	4,504	230
	Gorumari	1874-75	180	180	.....	180	47
	Charduar	1878-79	892	892	.....	892	54
	Bamoni Hill plantation	.....	8	8	.....	8	25
	Khalingdnar	1883-84	12,892	12,892	3,063	9,829	8
	Total	.....	18,542	18,542	3,129	15,413	364
	NOWGONG DISTRICT.						
Nowgong	Kholahat	1873-74	3,598	4,585	25	4,560	7
	Deboka	"	8,870	8,870	.....	8,870	121
	Diju	1879-80	5,742	5,742	.....	5,742	105
	Suang	1885-86	1,913	1,924	.....	1,924	81
	Bamuni	"	499	499	200	299	32
	Total	.....	20,622	21,620	225	21,395	418
	KHÁSI AND JAINTIA HILLS DISTRICT.						
Khási and Jaintia Hills	Shillong	1874-75	3,458	3,618	.....	3,618	608
	Riatkhwan	1881-82	960	960	.....	960	108
	Total	.....	4,418	4,578	.....	4,578	716
	Grand Total	.....	176,017	191,887	3,928	187,959	7,557

FORM No. 52.

Forest Department, Assam.—Area of Plantations, 1887-88.

Division.	Name of Plantation.	Area in acres. On 1st April 1887.	Added during the year.	Excluded during the year.	Area on 31st March 1888.	Receipts of the year	Charges. of the year
Regular Plantations	*Kulsi Plantation.*						
Kámrúp	Caoutchouc	148	.....	.....	148	.....	374
	Teak	168	.....	.....	168	.....	190
	Sisu	20	.....	.....	20	.....	90
	Bamboo	2	.....	.....	2	.....	2
	Add cost of nursery, &c.	.....	.....	.....	.....	.....	86
	Total	338	.....	.....	338	.....	742
	Chardwar Plantation.						
Darrang	Caoutchouc	1,043	.....	.....	1,043	.....	3,775
	Bamoni Hill Plantation.						
	Caoutchouc	8	.....	.....	8	.....	.....
	Total	1,051	.....	.....	1,051	.....	3,775
	Total Regular Plantations	1,389	.....	.....	1,389	.....	4,517
Cultural Operations.							
Gáro Hills	Cinchona nursery	.....	.....	.....	.....	.....	4
	Sál nursery	.....	.....	.....	.....	.....	57
Sibságar	Nambor timber plantations	106	35	.....	141	.....	305
Khási and Jaintia Hills.	Filling up of blanks	.....	.....	.....	.....	.....	9
	Total Cultural Operations	106	35	.....	141	.....	375
	Grand Total	1,495	35	.....	1,530	.....	4,892

The discrepancy noticed in the Government of India review of the Assam Forest Report for 1886-87 in Form No 52 of 2 acres short having been entered as the total area of regular plantations on the 31st March 1886, was already explained in paragraph 130 of the Report for 1886-87.

FORM No. 53.

Forest Department, Assam.—Trees felled or girdled by Government Agency during the year 1887-88.

(*Selection Fellings.*)

Division.	Trees felled or girdled. Description.	Number.
Kámrúp	Sál	59
	Sida	4
	Tita sappa	2
	Sama	5
Darrang	Sál	15
	„ posts (dead wood)	91
	„ logs (ditto)	5
	Koliari poles	23
	Total	204
	Abstract of the Circle.	
	Sál	74
	„ posts (deadwood)	91
	„ logs (ditto)	5
	Sida	4
	Tita sappa	2
	Sama	5
	Koliari posts	23
	Total	204

FORM No. 54.

FOREST DEPARTMENT ASSAM.—OUTTURN OF TIMBER AND FIREWOOD DURING THE YEAR 1887-88.

Division.	Description of materials.	Outturn in cubic feet.								
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grants.		Right-holders.
								Quantity.	Amount.	
	A—CLASSED STATE FORESTS AND WASTE LANDS.									
	(a) Reserved Forests.									
Gáro Hills	Sal-trees	4,710	.....	.....	4,710	.....	4,710	.....	.....	.....
	Bamboos	150	.....	.....	150	.....	150	.....	.....	.....
	Total	4,710	.....	.....	4,710	.....	4,710	.....	.....	.....
Goálpára	Sâl trees	135,210	.....	.....	135,210	.....	135,210	.....	.....	.....
	First-class trees	12,630	.....	.....	12,630	.....	12,630	.....	.....	.....
	Second ,, ,,	6,510	.....	.....	6,510	.....	6,510	.....	.....	.....
	Dead wood	50,560	.....	.....	50,560	.....	42,660	7,900	1,975	.....
	Fire wood	173,326	.....	.....	173,326	.....	.....	173,326	2,708	.....
	Charcoaol	2,632	.....	.....	2,632	.....	1,520	1,112	17	.....
	Bambools (No.)	200	.....	.....	200	.....	.....	200	4	.....
	Total	380,868	.....	.....	380,868	.....	198,530	182,338	4,704	.....
Kámrúp	Sâl-trees	110,444	.....	.....	110,444	2,360	108,084	.....	.....	.....
	First class trees	6,530	.....	.....	6,530	550	5,980	.....	.....	.....
	Second ,, ,,	2,172	.....	.....	2,172	420	1,742	10	2	.....
	Sâl poles	179	.....	.....	179	179	.....	.....	.....	.....
	Teak ,,	.....	.....	136	136	136	.....	.....	.....	.....
	Miscellaneous poles	86	.....	.....	860	303	365	192	6	.....
	Dead wood	28,648	.....	.....	28,648	146	15,472	13,030	783	.....
	Firewood	14,232	.....	.....	14,232	.....	32	14,200	443	.....
	Charcoal	603	.....	.....	603	.....	216	387	5	.....
	Bamboos (No.)	46,315	.....	.....	46,315	3,345	400	42,570	426	.....
	Total	163,668	.....	136	163,804	4,094	131,891	27,819	1,665	.....

Darrang	Sâl-trees	300	.....	.....	300	.....	.....	300	190	.....
	First-class trees	2,775	.....	.....	2,775	.....	2,275	500	120	.....
	Second „ „	14,600	.....	.....	14,600	.....	14,600	.....	.....	.....
	Dead wood	740	.....	.....	740	.....	740	.....	.....	.....
	„ Sal	310	.....	.....	310	.....	310	.....	.....	.....
	Poles	288	.....	.....	288	.....	288	.....	.....	.....
	Total	19,013	.....	.....	19,013	.....	18,213	800	310	.....
Nowgong	Sâl-trees	1,900	.....	.....	1,900	.....	1,900	.....	.....	.....
	First-class trees	1,230	.....	.....	1,230	.....	1,230	.....	.....	.....
	Second „ „	1,275	.....	.....	1,275	.....	1,075	200	16	.....
	Poles	1,032	.....	.....	1,032	.....	160	872	27	.....
	Boats	600	.....	.....	600	.....	600	.....	.....	.....
	Dead wood	2,552	.....	.....	2,552	.....	520	2,032	254	.....
	Fire „	74,700	.....	.....	74,700	.....	5,700	69,000	719	.....
	Charcoal	522	.....	.....	522	.....	522	.....	.....	.....
	Bamboos (No.)	9,000	.....	.....	9,000	.....	1,000	8,000	80	.....
	Total	83,811	.....	.....	83,811	.....	11,707	72,104	1,096	.....
Sibságar	First-class trees	2,700	.....	.....	2,700	.....	2,370	330	66	.....
	Second „ „	5,970	.....	.....	5,970	.....	5,370	600	40	.....
	Poles	894	.....	.....	894	.....	894	.....	.....	.....
	Dead wood	810	.....	.....	810	.....	810	.....	.....	.....
	Fire „	4,300	.....	.....	4,300	.....	4,300	.....	.....	.....
	Charcoal	1,476	.....	.....	1,476	.....	1,476	.....	.....	.....
	Bamboos (No.)	300	.....	.....	300	.....	300	.....	.....	.....
	Total	16,150	.....	.....	16,150	.....	15,220	930	106	.....
Cachar	First-class logs	18,758	.....	.....	18,758	.....	18,758	.....	.....	.....
	Second „ „	21,455	.....	.....	21,455	.....	21,455	.....	.....	.....
	Third „ „	211,981	.....	.....	211,981	.....	211,981	.....	.....	.....
	Posts and planks	799	.....	.....	799	.....	799	.....	.....	.....
	Boats	60	.....	.....	60	.....	60	.....	.....	.....
	Firewood	8,768	.....	.....	8,768	.....	8,768	.....	.....	.....
	Bamboos (No.)	539,225	.....	.....	539,225	.....	539,225	.....	.....	.....
	Total	261,821	.....	.....	261,821	.....	261,821	.....	.....	.....

FORM No. 54.—(*Continued.*)

Division.	Description of materials.	Outturn in cubic feet.								
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grants.		Right-holders.
								Quantity.	Value.	
									Rs.	
Sylhet	First-class logs	6,910	.....	.....	6,910	.....	6,910	.....	.....	.....
	Second „ „	1,914	.....	.....	1,914	.....	1,914	.....	.....	.....
	Third „ „	10,485	.....	.....	10,485	.....	10,485	.....	.....	.....
	Posts and planks	474	.....	.....	474	.....	474	.....	.....	.....
	Firewood	816	.....	.....	816	.....	816	.....	.....	.....
	Bamboos (No.)	255,025	.....	.....	255,025	.....	255,025	.....	.....	.....
	Total	20,599	.....	.....	20,599	.....	20,599	.....	.....	.....
	Total Reserved Forests	950,640	.....	136	950,776	4,094	662,691	283,991	7,881	...
	(*b*)—*Protected Forests.*									
Kámrúp	Dead wood	100	.....	.....	100	.....	.....	100	6	.....
	Total	100	.....	.....	100	.....	.....	100	6	.....
Lakhimpur	First-class trees	360	.....	.....	360	.....	360	.....	.....	.....
	Second „ „	19,940	.....	.....	19,940	.....	19,940	.....	.....	.....
	Total	20,300	.....	.....	20,300	.....	20,300	.....	.....	.....

Cachar	Posts and planks	474	...	...	474	...	474	...	...	...
	Boats	4,320	...	...	4,320	...	4,320	...	...	...
	Bamboos (No.)	325	...	...	325	...	325	...	...	...
	Total	4,794	...	...	4,794	...	4,794	...	...	...
Sylhet	First-class logs	1,892	...	...	1,892	...	1,892	...	...	...
	Second-class logs	1,682	...	...	1,682	...	1,682	...	...	...
	Third-class logs	5,192	...	...	5,192	...	5,192	...	...	...
	Posts and planks	12,078	...	...	12,078	...	278	11,860	738	...
	Firewood	127,676	...	...	127,676	...	831	126,845	3,964	...
	Bamboos (No.)	982,700	...	...	982,700	...	424,300	558,400	1,395	...
	Total	148,520	...	...	148,520	...	9,875	138,645	6,097	...
	Total Protected Forests	173,714	...	...	173,714	...	34,969	138,745	6,103	...
	B.—Unclassed State Forests and Waste Lands.									
Gáro Hills	Sâl-trees	18,540	...	...	18,540	...	18,540	...	...	...
	First-class trees	12,750	...	...	12,750	...	12,750	...	...	...
	Second-class trees	18,450	...	...	18,450	...	18,450	...	...	...
	Gáro boats	67,080	...	...	67,080	...	67,080	...	...	...
	Sâl boats	300	...	...	300	300	...	...	...	...
	„ logs	2,932	...	...	2,932	2,932	...	...	...	...
	„ sleepers	3,737	...	...	3,737	3,737	...	...	...	...
	„ beams	152	...	...	152	152	...	...	...	...
	„ planks	21	...	...	21	21	...	...	...	...
	„ side pieces	2	...	...	2	2	...	...	...	...
	Dead wood	18,450	...	...	18,450	...	18,450	...	...	...
	„ (sâl)	6,640	...	...	6,640	...	6,640	...	...	...
	Confiscated boats	180	...	...	180	180	...	...	...	...
	„ and drift logs	760	...	...	760	490	270	...	...	...
	Waif firewood	820	...	...	820	820	...	...	...	...
	„ bamboos (No.)	3,000	...	...	3,000	3,000	...	...	...	...
	Total	150,814	...	...	150,814	8,634	142,180	...	...	...

FORM No. 54.—(*Continued.*)

Division.	Description of materials.	Outturn in cubic feet.								
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers.	Free grants.		Right-holders.
								Quantity.	Value.	
									Rs.	
Goálpára	Sâl-trees	5,610	.....	.....	5,610	.....	5,610	.....	.....	.....
	First-class trees	750	.....	.....	750	.....	750	.....	.....	.....
	Second-class trees	417,960	.....	.....	417,960	.....	1,050	416,910	27,794	.....
	Dead wood	820	.....	.....	820	.....	820	.....	.....	.....
	Drift wood	310	.....	.....	310	310	.....	.....	.....	.....
	Firewood	1,237,154	.....	.....	1,237,154	.....	440	1,236,714	18,861	.....
	Bamboos ... (No.)	260,199	.....	.....	260,199	.....	.....	260,199	3,078	.....
	Total	1,662,604	.....	.....	1,662,604	310	8,670	1,653,624	49,753	.....
Kámrúp	Sâl-trees	50,080	.....	.....	50,080	.....	50,080	.....	.....	.....
	First-class trees	3,904	.....	.....	3,904	.....	3,904	.....	.....	.....
	Second „	12,207	.....	.....	12,207	.....	5,087	7,120	1,424	.....
	Dead wood	6,032	.....	.....	6,032	.....	676	5,356	250	.....
	Fire „	77,548	.....	.....	77,548	.....	2,584	74,964	2,342	.....
	Charcoal	1,278	.....	.....	1,278	.....	1,278	.....	.....	.....
	Bamboos ... ... (No.)	81,340	.....	.....	81,340	.....	.....	81,340	813	.....
	Total	151,049	.....	.....	151,049	.....	63,609	87,440	4,829	.....
Darrang	First-class trees	8,450	.....	.....	8,450	.....	8,450	.....	.....	.....
	Second „	51,680	.....	.....	51,680	.....	8,400	43,280	8,656	.....
	Poles	78	.....	.....	78	.....	78	.....	.....	.....
	Dead wood	675	.....	.....	675	.....	675	.....	.....	.....
	Charcoal	12,440	.....	.....	12,440	.....	1,640	10,800	67	.....
	Bamboos	1,465	.....	.....	1,465	.....	.....	1,465	15	.....
	Total	73,323	.....	.....	73,323	.....	19,243	54,080	8,738	.....

Nowgong	First-class trees	4,200	.....	.....	4,200	.....	4,200	.....	.....	.....
	Second „	53,900	.....	.....	53,900	.....	4,175	49,725	7,956	.....
	Boats	29,730	.....	.....	29,730	.....	29,730	.....	.....	.....
	Dead wood	3,174	.....	.....	3,174	.....	3,144	30	1	.....
	Firewood	407,760	.....	.....	407,760	.....	8,700	399,060	4,157	.....
	Charcoal	12,464	.....	.....	12,464	.....	12,464	.....	.....	.....
	Bamboos ... (No.)	129,064	.....	.....	129,064	.....	14,214	114,850	1,148	.....
	Total	511,228	.....	.....	511,228	.....	62,413	448,815	13,262	.....
Sibsagar	First-class trees	21,930	.....	.....	21,930	.....	21,810	120	24	.....
	Second „ „	238,510	.....	.....	238,510	.....	14,070	224,440	22,444	.....
	Poles	5,565	.....	.....	5,565	.....	5,565	.....	.....	.....
	First-class posts	1,200	.....	.....	1,200	.....	1,200	.....	.....	.....
	Boats	1,320	.....	.....	1,320	.....	1,320	.....	.....	.....
	Dead wood	120	.....	.....	120	.....	120	.....	.....	.....
	Drift wood	4,280	.....	.....	4,280	.....	4,280	.....	.....	.....
	Firewood	389,940	.....	.....	389,940	.....	25,200	364,740	3,647	.....
	Charcoal	11,644	.....	.....	11,644	.....	11,644	.....	.....	.....
	Bamboos ... (No.)	200,717	.....	.....	200,717	.....	2,350	198,367	3,967	.....
	Total ...	674,509	.....	.....	674,509	.....	85,209	589,300	30,082	.....
Lakhimpur	First-class trees	61,530	.....	.....	61,530	.....	13,530	48,000	9,600	.....
	Second „ „	174,120	.....	.....	174,120	.....	123,840	50,280	3,352	.....
	Poles	560	.....	.....	560	.....	560	.....	.....	.....
	Logs	4,350	.....	.....	4,350	.....	4,350	.....	.....	.....
	Boats	2,910	.....	.....	2,910	.....	2,910	.....	.....	.....
	Firewood	102,700	.....	.....	102,700	.....	80,000	22,700	355	.....
	Charcoal	3,813	.....	.....	3,813	.....	3,795	18	.....	.....
	Bamboos ... (No.)	15,842	.....	.....	15,842	.....	8,722	7,120	71	.....
	Total ...	349,983	.....	.....	349,983	.....	228,985	120,998	13,378	.....
Cachar	First-class logs	11,798	.....	.....	11,798	.....	11,798	.....	.....	.....
	Second „ „	7,144	.....	.....	7,144	.....	7,144	.....	.....	.....
	Third „ „	25,857	.....	.....	25,857	.....	25,323	534	33	.....
	Poles	436	.....	.....	436	.....	436	.....	.....	.....
	Posts and planks	326	.....	.....	326	.....	326	.....	.....	.....
	Boats	1,200	.....	.....	1,200	.....	1,200	.....	.....	.....
	Drift boats	180	.....	.....	180	180	.....	.....	.....	.....

FORM No. 54.—(*Concluded.*)

Division.	Description of materials.	Outturn in cubic feet.								
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers	Free grants.		Right-holders.
								Quantity.	Value.	
	Drift wood	1,101	.....	.....	1,101	1,101	.....	.....	.....	.....
	Firewood	6,820	.....	.....	6,820	.....	3,307	3,513	110	.....
	Bamboos ... (No.)	112,650	.....	.....	112,650	.....	96,250	16,400	41	.....
	Total ...	54,862	.....	.....	54,862	1,281	49,534	4,047	184	.....
Sylhet	First-class logs	74	.....	.....	74	.....	74	.....	.....	.....
	Second „ „	467	.....	.....	467	.....	467	.....	.....	.....
	Third „ „	18,025	.....	.....	18,025	.....	18,025	.....	.....	.....
	Posts and planks	1,203	.....	.....	1,203	.....	243	960	60	.....
	Firewood	18,641	.....	.....	18,641	.....	3,566	15,075	471	.....
	Bamboos ... (No.)	107,425	.....	.....	107,425	.....	36,375	71,050	179	.....
	Total ...	38,410	.....	.....	38,410	.....	22,375	16,035	710	.....
Khási and Jaintia Hills ...	First class trees	30	.....	.....	30	.....	30	.....	.....	.....
	Second „ „	30	.....	.....	30	.....	30	.....	...	.....
	Poles	.....	.....	520	520	.....	520	.....	.....	.....
	Dead wood	.....	.....	700	700	.....	700	.....	.....	.....
	Firewood	.....	.....	128	128	.....	128	.....	.....	.....
	Confiscated wood	10	.....	.....	10	.....	10	.....	.....	.....
	Total ...	70	.....	1,348	1,418	.....	1,418	.....	.....	.....
	Total of unclassed State Forests and Waste Lands.	3,666,852	.....	1,348	3,668,200	10,225	683,636	2,974,339	120,916	.....
	Grand Total ...	4,791,206	.....	1,484	4,792,690	14,319	1,381,296	3,397,075	134,900	.....

Abstract of the Circle.									
Sâl-trees	326,794	.....	.....	326,794	2,360	324,134	300	190	.....
First-class trees	139,769	.....	.....	139,769	550	90,269	48,950	9,810	.....
Second „	1,017,324	.....	.....	1,017,324	420	224,339	792,565	71,684	.....
First-class logs	39,432	.....	.....	39,432	.....	39,432	.....	.....	.....
Second „ „	32,662	.....	.....	32,662	.....	32,662	.....	.....	.....
Third „ „	271,540	.....	.....	271,540	.....	271,006	534	33	.....
Sâl logs	2,932	.....	.....	2,932	2,932	.....	.....	.....	.....
Miscellaneous logs	4,350	.....	.....	4,350	.....	4,350	.....	.....	.....
Boats (Sâl)	300	.....	.....	300	300	.....	.....	.....	.....
„ (other wood)	40,140	.....	.....	40,140	.....	40,140	.....	.....	.....
„ (Gáro)	67,080	.....	.....	67,080	.....	67,080	.....	.....	.....
„ confiscated and drift ...	360	.....	.....	360	360	.....	.....	.....	.....
Wood „ „	6,451	.....	.....	6,451	1,901	4,550	.....	.....	.....
Sâl poles	179	.....	.....	179	179	.....	.....	.....	.....
Teak „	.....	.....	136	136	136	.....	.....	.....	.....
Miscellaneous poles	9,713	.....	520	10,233	303	8,866	1,064	33	.....
Dead wood (Sâl)	6,950	.....	.....	6,950	.....	6,950	.....	.....	.....
„ „ other wood ...	112,681	.....	700	113,381	146	84,787	28,448	3,269	.....
First-class posts	1,200	.....	.....	1,200	.....	1,200	.....	.....	.....
Sâl sleepers	3,737	.....	.....	3,737	3,737	.....	.....	.....	.....
„ beams...	152	.....	.....	152	152	.....	.....	.....	.....
„ planks...	21	.....	.....	21	21	.....	.....	.....	.....
„ side pieces	2	.....	.....	2	2	.....	.....	.....	.....
Posts and planks	15,354	.....	.....	15,354	.....	2,594	12,760	798	.....
Charcoal	46,872	.....	.....	46,872	.....	34,555	12,317	89	.....
Firewood	2,645,211	.....	128	2,645,339	820	144,382	2,500,137	37,777	.....
Bamboos (No.)	2,744,942	.....	.....	2,744,942	6,345	1,378,636	1,359,961	11,217	.....
Total	4,791,206	.....	1,484	4,792,690	14,319	1,381,296	3,397,075	134,900	.....

NOTE.—All totals in this statement are exclusive of Bamboos, which are quoted in numbers only.

FORM No. 55.

FOREST DEPARTMENT, ASSAM.—OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1887-88.

Division.	Description of produce.	Produce removed or utilised.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	A—CLASSED STATE FORESTS AND WASTE LANDS.		Rs.		Rs		Rs.		Rs.		Rs.
	(1)—*Reserved Forests.*										
Gáro Hills ...	Elephant tusks	4	643	.....	.....	.....	.....	.....	.....	4	643
	Total	4	643	.....	.....	.....	.....	.....	.....	4	643
Goálpára	Canes (bundles)	.....	.....	400	3	9,657	72	.....	.....	10,057	75
	Grass and reeds (bundles)	.....	.....	.....	.....	116,562	291	.....	.....	116,562	291
	Total	.....	.....	400	3	126,219	363	.....	.....	126,619	366
Kámrúp	Canes (bundles)	138	1	.....	.....	400	3	.....	.....	538	4
	Rent of trees for rearing silkworms...	.....	.....	163	23	.....	.....	.....	.....	163	23
	" " " lac	.....	.....	1	1	.....	.....	.....	.....	1	1
	Thatching-grass (bundles)	5,447	14	.....	.....	29,300	73	.....	.....	34,747	87
	Reeds (bundles)	178	6	.....	.....	660	11	.....	.....	838	17
	Total	5,763	21	164	24	30,360	87	.....	.....	36,287	132
Darrang	India-rubber (mds.).....	1	106	.....	.....	.....	.....	.....	.....	1	106
	Canes (bundles)	.....	.....	16,300	122	.....	.....	.....	.....	16,300	122
	Pipul mahál	.....	.....	.....	25	.....	.....	.....	.....	.....	25
	Total	1	106	16,300	147	.....	.....	.....	.....	16,301	253
Nowgong.....	Canes (bundles)	.....	.....	14,976	217	370	3	.....	.....	15,346	220
	Grass and reeds	.....	.....	330	5	101,640	303	.....	.....	101,970	308
	Total	.....	.....	15,306	222	102,010	306	.....	.....	117,316	528

Sibságar	Canes (bundles)	.....	.....	4,100	31	.....	.....	.....	.....	4,100	31
	Thatching-grass (bundles)	.....	.....	2,500	6	.....	.....	.....	.....	2,500	6
	Bil grass (mahál)	.....	.....	.....	55	.....	.....	.....	.....	.....	55
	Total	.....	.....	6,600	92	.....	.....	.....	.....	6,600	92
Cachar	Agar (baskets)	.....	.....	4	6	.....	.....	.....	.....	4	6
	Canes (bundles)	.....	.....	15,373	961	.....	.....	.....	.....	15,373	961
	Thatching grass and reeds (c. ft.) ...	.....	.....	4,000	3	.....	.....	.....	.....	4,000	3
	Total	.....	.....	19,377	970	.....	.....	.....	.....	19,377	970
Sylhet	Agar (baskets)	.....	.....	556	180	.....	.....	.....	.....	556	180
	Canes (bundles)	.....	.....	2,380	149	.....	.....	.....	.....	2,380	149
	Thatching-grass and reeds (bundles)	.....	.....	146,855	287	.....	.....	.....	.....	146,855	287
	Rubber-mahál	.....	.....	.....	250	.....	.....	.....	.....	.....	250
	Total	.....	.....	149,791	866	.....	.....	.....	.....	149,791	866
	Total	5,768	770	207,938	2,324	258,589	756	.....	.....	472,295	3,850
	(b)—Protected Forests.										
Sylhet	Canes (bundles)	.....	.....	3,457	216	9,622	601	.....	.....	13,079	817
	Thatching-grass and reeds (bundles)..	.....	.....	109,961	363	299,236	1,296	.....	.....	409,197	1,659
	Pathi (dals)	.....	.....	7,450	5	.....	.....	.....	.....	7,450	5
	Sun-grass mahál	.....	.....	.....	287	.....	.....	.....	.....	.....	287
	Total	.....	.....	120,868	871	308,858	1,897	.....	.....	429,726	2,768
	Total of Protected Forests	.....	.....	120,868	871	308,858	1,897	.....	.....	429,726	2,768
	Total of Classed State Forests ...	5,768	770	328,806	3,195	567,447	2,653	.....	.....	920,021	6,618
	B.—Unclassed State Forests and Waste Lands.										
Gáro Hills ...	Foreign gurkati passes (No.)	.....	.....	3,702	7,404	.....	.....	30	60	3,732	7,464
	Gáro " "	.....	.....	2,418	913	.....	.....	.....	.....	2,418	913
	Grazing buffaloes "	.....	.....	1,235	268	.....	.....	.....	.....	1,235	268
	Total	.....	.....	7,355	8,585	.....	.....	30	60	7,385	8,645

FORM No. 55.—(*Continued.*)

Division.	Description of produce.	Produce removed or utilised.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.		Rs.		Rs.
Goálpára	Canes (bundles)	.....	.....	385	3	31,594	237	.....	.....	31,979	240
	Fruits	.....	.....	.....	14	.....	.....	.....	.....	.....	14
	Total	.....	.....	385	17	31,594	237	.....	.....	31,979	254
Kámrúp	Rent of trees for rearing silkworms..	.....	.....	106	15	.....	.....	.....	.....	106	15
	Ditto ditto ditto lac.....	.....	.....	2	1	.....	.....	.....	.....	2	1
	Thatching-grass (bundles)	.....	.....	9,000	23	.....	.....	.....	.....	9,000	23
	Canes (bundles)	.....	.....	200	2	2,950	22	.....	.....	3,150	24
	Pathi (dals)	.....	.....	.....	.....	810	1	.....	.....	810	1
	Rubber mahál	.....	.....	.....	300	.....	.....	.....	.....	.....	300
	Total	.....	.....	9,308	341	3,760	23	.....	.....	13,068	364
Darrang	Canes (bundles)	.....	.....	100	1	5,903	44	.....	.....	6,003	45
	India-rubber (maunds)	.....	.....	12	799	.....	.....	.....	.....	12	799
	Rubber mahál	.....	.....	.....	21,005	.....	.....	.....	.....	.....	21,005
	Total	.....	.....	112	21,805	5,903	44	.....	.....	6,015	21,849
Nowgong.....	Canes (bundles)	.....	.....	31,604	469	14,890	112	.....	.....	46,494	581
	Thatching-grass and reeds (bundles).	.....	.....	800	2	.....	.....	.....	.....	800	2
	Rubber mahal	.....	.....	.....	34	.....	.....	.....	.....	.....	34
	Total	.....	.....	32,404	505	14,890	112	.....	.....	47,294	617
Sibságar	Canes (bundles)	.....	.....	11,950	90	40,762	305	.....	.....	52,712	395
	Thatching-grass (bundles)	.....	.....	23,100	48	.....	.....	.....	.....	23,100	48
	Reeds (bundles)	.....	.....	220	7	.....	.....	.....	.....	220	7
	Lac mahál.....	.....	.....	.....	88	.....	.....	.....	.....	.....	88
	Cane „	.....	.....	.....	405	.....	.....	.....	.....	.....	405
	Total	.....	.....	35,270	638	40,762	305	.....	.....	76,032	943

Lakhimpur ...	Rubber-mahál	.....	.....	.....	10,600	.....	.....	.....	.....	.....	10,600
	Canes (bundles)	.....	.....	250,495	1,887	.....	.....	.....	.....	250,495	1,887
	Elephant tusk	.....	.....	1	100	96,400	.....	.....	.....	1	100
	Total	.....	.....	250,496	12,587	.....	.....	.....	.....	250,496	12,587
Cachar ...	Agar (baskets)	.....	.....	205	307	.....	.....	.....	.....	205	307
	Canes (bundles)	.....	.....	1,978	123	285	18	.....	.....	2,263	141
	Thatching-grass and reed (c. ft.)	.....	.....	16,000	40	.....	.....	.....	.....	16,000	40
	Ditto mahals	.....	.....	.....	55	.....	.....	.....	.....	.....	55
	Rubber-mahál	.....	.....	.....	275	.....	.....	.....	.....	.....	275
	Total	.....	.....	18,183	800	285	18	.....	.....	18,468	818
Sylhet	Canes (bundles)	.....	.....	275	17	1,112	70	.....	.....	1,387	87
	Thatching-grass and reeds (bundles)	.....	.....	2,038	12	2,969	92	.....	.....	5,007	104
	Pathi (dals)	.....	.....	14,125	9	1,960	1	.....	.....	16,085	10
	Sun-grass mahál	.....	.....	.....	1,119	.....	.....	.....	.....	.....	1,119
	Total	.....	.....	16,438	1,157	6,041	163	.....	.....	22,479	1,320
Khási and Jaintia Hills.	Thatching-grass (bundles)	.....	.....	466	31	.....	.....	.....	.....	466	31
	Reeds (bundles)	.....	.....	144	18	.....	.....	.....	.....	144	18
	Fruits	.....	.....	.....	95	.....	.....	.....	.....	.....	95
	Rubber-mahál	.....	.....	.....	500	.....	.....	.....	.....	.....	500
	Cassia ,,	.....	.....	.....	123	.....	.....	.....	.....	.....	123
	Total	.....	.....	610	767	.....	.....	.....	.....	610	767
	Total of Unclassed State Forests and Waste Lands.	.....	.....	370,561	47,202	103,235	902	30	60	473,826	48,165
	Grand Total	5,768	770	699,367	50,397	670,682	3,555	30	60	1,375,847	54,782

FORM No. 55.—(*Concluded.*)

Division.	Description of produce.	Produce removed or utilised.									
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs		Rs		Rs		Rs		Rs
	ABSTRACT OF THE CIRCLE.										
	Gurkati Produce.										
	Foreign passes	.....	.....	3,702	7,404	.....	.....	30	60	3,732	7,464
	Gáro „	.....	.....	2,418	913	.....	.....	.....	.....	2,418	913
	Canes (bdls.)	138	1	353,973	4,291	117,545	1,487	.....	.....	471,656	5,779
	Thatching grass (bdls.)	5,447	14	35,066	108	29,300	73	.....	.....	69,813	195
	Reeds (bdls.)	178	6	364	25	600	11	.....	.....	1,202	42
	Grass and reeds (bdls.)	.....	.....	259,984	669	520,407	1,982	.....	.....	780,391	2,651
	Ditto ditto (cubic feet)	.....	.....	20,000	43	.....	.....	.....	.....	20,000	43
	Pathi (dals)	.....	.....	21,575	14	2,770	2	.....	.....	24,345	16
	Agar (baskets)	.....	.....	765	493	.....	.....	.....	.....	765	493
	India-rubber (mds.)	1	106	12	799	.....	.....	.....	.....	13	905
	Elephant tusks	4	643	1	100	.....	.....	.....	.....	5	743
	Fruits	.....	.....	.....	109	.....	.....	.....	.....	.....	109
	Grazing	.....	.....	1,235	268	.....	.....	.....	.....	1,235	268
	Trees for rearing silkworms	.....	.....	269	38	.....	.....	.....	.....	269	38
	Ditto „ lac	.....	.....	3	2	.....	.....	.....	.....	3	2
	Bil grass mahál	.....	.....	.....	55	.....	.....	.....	.....	.....	55
	Sun „ „	.....	.....	.....	1,461	.....	.....	.....	.....	.....	1,461
	Cane „	.....	.....	.....	405	.....	.....	.....	.....	.....	405
	India-rubber mahál	.....	.....	.....	32,964	.....	.....	.....	.....	.....	32,964
	Cassia „	.....	.....	.....	123	.....	.....	.....	.....	.....	123
	Lac „	.....	.....	.....	88	.....	.....	.....	.....	.....	88
	Pipul „	.....	.....	.....	25	.....	.....	.....	.....	.....	25
	Total	5,768	770	699,367	50397	670,682	3,555	30	60	1,375,847	54,782

FORM No. 56.

FOREST DEPARTMENT, ASSAM.—ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO SALE DEPÔTS OR SOLD LOCALLY DURING THE YEAR 1887-88.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
BALANCE AT COMMENCEMENT OF THE YEAR.				
Gáro Hills Division				
Logs of sal timber ...	857	11,085		
Beams of ditto ...	119	805		
Sleepers of ditto ...	7,398	9,732		
Planks of ditto ...	12	4	8,386	21,626
Received from the forests in depôts.				
Sâl logs ...	291	2,932		
Boats ...	10	...		
Confiscated boats ...	4	...		
,, logs ...	4	...		
Drift dugouts ...	5	...		
,, Jarul logs ...	15	...		
,, Salarongy logs ...	2	...		
,, Rongy ,, ...	1	...		
,, Sama ,, ...	24	...		
,, logs (miscellaneous) ...	77	2,197		
,, firewood ...	820	...		
Elephant tusks ...	4	...	1,257	5,129
Received from the forests and sold locally.				
Confiscated Sal logs ...	11	...		
,, 1st-class logs ...	2	...		
,, 2nd ,, ...	53	...		
,, dugouts ...	7	...		
,, bamboos ...	3,000	...		
,, ploughs ...	10	...		
Drift 1st-class logs ...	58	1,530		
,, 2nd ,, ...	113	2,340		
,, miscellaneous trees (dead wood) ...	160	...		
,, planks ...	9	...		
,, posts ...	41	410		
,, canes ...	60	...	3,524	4,280
Received by conversion in depôts.				
Sal planks ...	65	...		
,, beams ...	9	152		
,, sleepers ...	2,851	3,737	2,925	3,889
Total ...	.....	...	16,092	34,924

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Removed by purchasers from Depôts.				
Sal logs ...	48	645		
,, sleepers ...	3,439	4,842		
,, planks ...	77	4		
,, beams ...	2	...		
Boats ...	10	...		
Confiscated boats ...	4	...		
,, dugouts ...	3	...		
Drift logs (miscellaneous) ...	24	647		
Elephant tusks ...	4	...	3,603	5,638
Converted in Depots.				
Sal logs ...	533	6,059	533	6,059
Received from the forests and sold locally.				
Confiscated Sâl logs ...	11	...		
,, 1st-class ...	2	...		
,, 2nd-class ...	53	...		
,, dugouts ...	7	...		
,, bamboos ...	3,000	...		
,, ploughs ...	10	...		
Drift 1st-class ...	58	1,530		
,, 2nd ,, ...	113	2,340		
,, miscellaneous trees (dead wood) ...	160	...		
,, planks ...	9	...		
,, posts ...	41	410		
,, canes ...	60	...	3,524	4,280
BALANCE AT FOREST DEPÔTS AT CLOSE OF THE YEAR.				
GÁRO HILLS DIVISION.				
Sâl logs ...	575	7,813		
,, sleepers ...	6,810	9,127		
,, beams ...	126	957		
Drift Jarul logs ...	15	...		
,, Rongy ,, ...	1	...		
,, Sama ,, ...	24	...		
,, Salarongy logs ...	2	...		
,, firewood ...	820	...		
Confiscated logs ...	4	...	8,377	17,897
CACHAR DIVISION.				
Drift logs (miscellaneous) ...	53	1,550		
,, dugouts ...	2	...	55	1,550
Total ...	...	...	16,092	34,924

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1887-88.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
	Number.	C. feet.	Value.	Number.	C. feet.	Value.	In favour of the year.	Against the year.
GÁRO HILLS DIVISION.			Rs.			Rs.	Rs.	Rs.
Sál beams	119	805	1,207	126	957	504	.....	703
„ planks	12	4	6	.....	.....	.....	.....	6
„ logs	857	11,085	8,570	575	7,313	1,150	.....	7,420
„ sleepers	7,398	9,732	12,946	6,810	9,127	4,256	.....	8,690
Drift logs	.....	.....	.....	42	.....	42	42	.....
Confiscated logs.....	.....	.....	.....	4	.....	4	4	.....
Firewood	.....	.....	.....	820	.....	205	205	.....
Total	.....	.....	22,729	.....	.....	6,161	251	16,819
CACHAR DIVISION.								
Drift logs	.....	.....	.....	53	1,550	106	106	.....
„ dugouts	.....	.....	.....	2	.....	20	20	.....
Total	.....	.....	.....	.....	.....	126	126	.....
Grand Total...	.....	.....	22,729	.....	.....	6,287	377	16,819

Net difference against the year Rs. 16,442.

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1887-88.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
DIRECTION.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments ...	12	250	10	190	.....	60
Tools	21	33	21	33	.....	.....
Office and rest-house furniture ...	69	1,369	69	1,369	.....	.....
Tents ...	1	185	1	100	.....	85
Miscellaneous	.....	428	.....	428	.....	.....
Buildings.						
Out-houses ...	5	140	5	140	.....	.....
Live Stock.						
Elephants ...	2	3,800	2	3,800	.....	.....
Total ...	.....	6,205	.....	6,060	.....	145
WORKING PLANS DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	794	2,756	649	1,589	.....	1,167
Tools ...	322	265	293	264	.....	1
Office furniture ...	4	68	16	222	154	.....
Tents ...	.....	.....	.....	.....	.....	.....
Miscellaneous ...	.....	217	.....	95	.....	122
Live Stock.						
Elephants ...	.....	.....	2	3,000	3,000	.....
Total ...	.....	3,306	.....	5,170	3,154	1,290

FORM No. 57.—(*Continued.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
		Rs.		Rs.	Rs.	Rs.
GÁRO HILLS DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	130	415	164	575	160	.....
Tools ...	575	866	404	602	.....	264
Office and rest-house furniture ...	45	1,251	45	1,251	.....	.....
Miscellaneous ...	.....	574	.....	589	15	.....
Buildings.						
Tura Bungalow ...	1	5,437	1	5,437	.....	.....
„ godown ...	1	1,381	1	1,381	.....	.....
Damra inspection bungalow ...	1	512	1	512	.....	.....
Bagmara bungalow ...	.....	.....	1	200	200	.....
Live Stock.						
Elephants ...	1	1,900	1	1,900	.....	.....
Total ...	.....	12,336	.....	12,447	375	264
GOÁLPÁRA DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	26	244	24	213	.....	31
Tools ...	338	474	335	398	...	76
Office and rest-house furniture ...	58	918	73	983	65	.....
Tents ...	1	100	1	25	.....	75
Miscellaneous ...	.....	729	.....	616	.....	113
Buildings.						.....
Dhubri bungalow ...	1	8,000	1	8,000	.....	.....
Other houses ...	27	885	27	830	.....	55
Live Stock.						
Elephants ...	2	3,700	2	3,700	.....	.....
Total ...	.....	15,050	.....	14,765	65	350
KÁMRÚP DIVISION.						
Stores, Tools and Plant.						
Surveying and other intruments ...	42	145	42	135	.....	10
Tools ...	383	752	459	680	.....	72
Office and rest-house furniture ...	72	1,012	72	970	.....	42
Tents ...	1	20	1	15	.....	5
Miscellaneous ...	.....	1,719	.....	1,773	54	.....
Buildings.						
Kulsi plantation bungalow ...	1	3,000	1	3,000	.....	.....
Gauháti bungalow ...	1	5,658	1	5,658	.....	.....
Other houses ...	73	1,187	79	1,158	.....	29
Live Stock.						
Elephants ...	3	3,300	3	4,400	1,100	.....
Bullocks ...	2	120	2	110	.....	10
Total ...	.....	16,913	.....	17,899	1,154	168

FORM No. 57.—(*Continued.*)

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	No.	Value.	No.	Value.	In favour of the year.	Against the year.
Darrang Division.		Rs		Rs	Rs	Rs
Stores, Tools, and Plant.						
Surveying and other instruments ...	24	273	72	339	66	.....
Tools	480	577	404	555	.....	22
Office and rest-house furniture ...	76	781	98	1,021	240	.....
Tents	2	108	2	108	.....	.....
Miscellaneous	.....	450	.....	425	.....	25
Buildings.						
Bhairabighat bungalow and inspection houses.	3	3,800	3	3,800	.....	.....
Other houses	16	400	19	1,400	1,000	.....
Plantation bungalow	.....	.....	1	5,000	5,000	.....
Live Stock.						
Elephants	2	2,800	2	2,800	.....	.....
Total	.....	9,189	.....	15,448	6,306	47
Nowgong Division.						
Stores, Tools, and Plant.						
Surveying and other instruments ...	17	129	17	129	.....	.....
Tools	111	222	232	250	28	.....
Office and rest-house furniture ...	33	665	33	655	.....	10
Tents	.....	.....	.....	.....	.....	.....
Miscellaneous	.....	226	.....	265	39	.....
Buildings.						
Inspection houses	2	160	2	100	.....	60
Other houses	8	200	8	150	.....	50
Live Stock.						
Elephants	1	1,100	1	1,200	100	.....
Total	.....	2,702	.....	2,749	167	120
Sibságar Division.						
Stores, Tools, and Plant						
Surveying and other instruments ...	27	59	30	69	10	.....
Tools	268	427	281	127	.....	300
Office and rest-house furniture ...	46	650	52	713	63	.....
Tents	.....	.....	1	85	85	.....
Miscellaneous	.....	450	.....	479	29	.....
Buildings.						
Sibságar bungalow	1	5,000	1	5,000	.....	.....
Golághát bungalow and inspection houses.	3	4,000	3	4,000	.....	.....
Jorhát bungalow	.....	.....	1	220	220	.....
Other houses	8	300	7	200	.....	100
Live Stock.						
Elephants	2	2,800	.....	.....	.....	2,800
Total	.....	13,686	.....	10,893	407	3,200

FORM No. 57.—(*Concluded*).

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	No.	Value.	No.	Value.	In favour of the year.	Against the year.
LAKHIMPUR DIVISION.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments ...	45	500	50	601	101	.....
Tools	187	500	136	449	.....	51
Office and rest-house furniture ...	76	1,072	76	1,066	.....	6
Tents	2	306	1	80	.....	226
Miscellaneous	.....	1,150	.....	973	.....	177
Buildings.						
Lakhimpur bungalow	1	8,510	1	8,510	.....	.....
Other houses	25	1,886	25	1,886	.....	.....
Live Stock.						
Elephants	3	4,000	2	3,000	.....	1,000
Total ...	.....	17,924	.....	16,565	101	1,460
CACHAR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	13	316	13	316	.....	.....
Tools	288	587	290	568	.....	19
Office and rest-house furniture ...	103	1,185	107	1,169	.....	16
Tents	1	40	1	20	.....	20
Miscellaneous	.....	318	.....	257	.....	61
Buildings.						
Divisional and office bungalow, revenue stations, and inspection houses.	8	9,275	8	8,775	.....	500
Other houses	40	1,396	40	1,171	.....	225
Live Stock.						
Elephant	1	600	1	1,500	900	.....
Total... ...	.....	13,717	.....	13,776	900	841
SYLHET DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	40	153	40	153	.....	.....
Tools	17	69	17	69	.....	.....
Office and rest-house furniture ...	35	634	44	726	92	.....
Tents	.....	.....	.....	.....	.....	.....
Miscellaneous	.....	146	.....	154	8	.....
Buildings.						
Office and rest-houses	4	517	6	627	110	.....
Other houses	14	260	16	290	30	.....
Total	.....	1,779	.....	2,019	240	.....
KHÁSI AND JAINTIA HILLS DIVISION.						
Stores, Tools and Plant.						
Tools	21	20	17	17	.....	3
Miscellaneous	.....	120	.....	120	.....	.....
Buildings.						
Small houses	4	330	4	330	.....	.....
Total	.....	470	.....	467	.....	3
Grand Total	.....	1,13,277	.....	1,18,258	12,869	7,888

Net difference in favour of the year Rs. 4,981

FORM No. 58.

FOREST DEPARTMENT, ASSAM.—SUMMARY OF REVENUE AND EXPENDITURE OF THE DIFFERENT DIVISIONS, 1887-88.

Budget Heads.	Direction.	Working Plans Division.	Gáro Hills Division.	Goálpára Division.	Kámrúp Division.	Darrang Division.	Nowgong Division.	Sibságar Division.	Lakhimpur Division.	Cachar Division.	Sylhet Division.	Khási and Jaintia Hills Division.	Total.
RECEIPTS.													
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
I.—Timber and other produce removed from the forests by Government agency—													
a. Timber	.....	.....	745 12 10	.....	74 0 0	.....	.....	695 5 3	.....	.....	.....	.....	1,225 2 1
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	642 3 0	.....	.....	105 11 0	.....	.....	.....	.....	.....	.....	748 14 0
II.—Timber and other produce removed from the forests by consumers or purchasers	.....	.....	8,364 2 9	.....	.....	.....	295 14 0	.....	.....	.....	783 4 0	.....	9,443 4 9
a. Timber	.....	.....	11,250 7 3	34,087 0 0	40,363 10 0	6,818 11 4	6,181 7 0	9,112 13 6	14,487 5 6	35,518 15 3	18,221 12 3	12 6 0	166,304 8 1
b. Firewood and charcoal	.....	.....	.....	29 10 0	101 12 0	33 8 0	146 14 0	363 9 0	892 15 3	81 9 0	325 13 2	2 0 0	1,987 11 0
c. Bamboos	.....	.....	1 8 0	64 4 6	4 0 0	11 10 2	165 15 6	33 0 0	166 15 0	1,502 11 6	1,780 4 0	.....	3,739 4 2
d. Grazing and fodder grass	.....	.....	268 4 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	268 4 0
e. Other minor produce	.....	.....	.....	3,989 2 8	439 5 0	21,957 4 0	521 15 11	790 3 0	12,586 4 6	1,452 2 0	2,713 2 9	551 1 0	44,031 13 10
III.—Drift and waif wood and confiscated forest produce	.....	.....	86 2 0	20 4 0	227 13 0	51 0 0	278 9 0	406 14 0	.....	314 2 6	411 10 3	.....	1,786 6 9
IV.—Revenue from forests not managed by Government—													
a. Duty on foreign timber and other forest produce	.....	.....	.....	752 0 0	.....	9 8 0	.....	.....	.....	7,167 6 9	.....	.....	7,928 14 9
b. Revenue from shared and private forests	.....	.....	1,317 14 4	.....	3,219 13 0	.....	.....	.....	.....	.....	.....	969 14 0	5,487 9 4
V.—Miscellaneous—													
a. Fines and forfeitures	.....	.....	263 8 0	110 8 0	181 5 0	56 0 0	47 10 0	3 8 0	268 4 9	.....	2 10 0	.....	937 13 9
b. Refunds	1 5 4	212 0 0	126 6 0	2 8 0	1 14 6	.....	.....	.....	5 12 0	.....	.....	.....	349 14 10
c. Other sources	1 14 0	1,000 0 0	585 1 0	837 3 0	1,547 8 9	461 5 9	980 2 6	623 14 5	841 8 0	2,271 9 0	11,949 15 9	220 6 6	22,420 2 8
Total receipts	3 3 4	1,212 0 0	23,652 5 2	39,852 0 2	46,362 1 3	29,504 10 3	8,618 7 11	11,686 8 2	29,249 2 0	39,408 1 6	36,117 8 9	1,685 11 6	267,311 12 0
A.—CONSERVANCY AND WORKS.													
I.—Timber and other produce removed from the forests by Government agency:—													
a. Timber	.....	.....	4,147 0 7	.....	.....	.....	.....	8 7 0	.....	.....	.....	.....	4,155 7 7
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	.....	.....	71 8 0	.....	.....	.....	.....	.....	.....	71 8 0
II.—Timber and other produce removed from the forests by consumers or purchasers.	.....	.....	1,786 13 8	894 3 6	588 3 6	122 9 2	205 15 9	86 2 10	2,581 3 4	266 7 5	1,910 15 2	.....	8,455 9 0
III.—Drift and waif wood and confiscated forest produce	.....	.....	2 8 6	.....	.....	.....	20 14 4	81 1 9	.....	10 0 0	.....	.....	114 6 7
IV.—Revenue from forests not managed by Government—													
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—Rent of leased forests, and payments to shareholders in forests managed by Government.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VI.—Live stock, stores, tools and plant:—													
a. Purchase of cattle	2,800 0 0	.....	.....	.....	50 0 0	.....	.....	.....	.....	.....	.....	.....	2,850 0 0
b. Feed and keep of cattle	505 15 9	173 8 8	718 0 4	913 1 8	1,605 5 6	810 12 3	315 0 10	646 14 0	778 6 6	231 1 6	.....	.....	6,698 3 10
c. Purchase of stores, tools and plant	1,810 4 2	651 9 6	188 12 6	240 14 0	291 6 6	372 13 2	[illegible] 11 11	300 7 6	19 4 0	36 11 9	118 8 0	.....	4,109 7 0
VII.—Communications and buildings—													
a. Roads and bridges	.....	.....	1,398 10 8	.....	653 1 6	617 5 10	.....	356 15 0	27 [illegible] 0	436 10 0	.....	.....	3,490 7 0
b. Buildings	.....	.....	576 9 5	1,210 7 11	989 9 6	1,043 2 0	158 6 10	673 9 9	610 2 9	8 9 4 3	196 13 6	15 [illegible] 0	6,293 2 11
c. Other works	.....	.....	.....	.....	.....	.....	5 8 0	.....	.....	118 5 0	.....	.....	123 13 0
VIII.—Demarcation, improvement and extension of forests—													
a. Demarcation	.....	.....	112 11 3	290 9 0	351 6 0	194 3 0	483 6 0	547 8 0	1,005 12 0	947 10 6	.....	19 12 0	3,952 13 3
b. Compensation for land and rights	.....	.....	3,820 0 0	.....	.....	.....	.....	20 0 0	100 0 0	.....	.....	.....	3,940 0 0
c. Surveys and working plans	131 [illegible] 0	4,803 2 [illegible]	[illegible]	.....	.....	73 0 0	46 0 0	9 14 0	.....	[illegible] 1 0	.....	.....	5,060 1 13

d. Sowing and planting	.....	.....	61 2 8	.....	742 7	2,774 14 8	.....	305 4 9	.....	.....	.....	9 8 0	4,893 8 10
e Protection from fire	.....	.....	107 14 4	4,271 8 1	2,416 11 0	299 4 0	434 0 3	.....	.....	.....	.....	755 14 6	8,285 4 2
f Other works	1,677 15 5	.....	24 0 0	962 3 9	1,391 15 3	405 9 0	1,148 7 10	1,121 7 4	582 12 2	340 0 0	2,088 7 0	436 11 6	10,169 9 3
IX.—Miscellaneous—													
a. Refunds	.....	2 14 6	.....	0 7 3	.....	80 10 0	92 3 0	7,096 8 0	654 1 6	.....	126 7 4	.....	8,052 8 7
b. Law charges	1,296 10 0	.....	21 0 3	64 6 0	7 7 0	.....	56 0 0	.....	274 12 6	120 0 0	26 12 0	.....	1,886 15 9
c Other charges	72 12 0	192 15 3	456 3 2	329 7 3	727 3 9	209 0 6	94 4 6	129 11 0	246 15 10	318 10 3	67 2 3	.....	3,834 10 9
Total, A.—Conservancy and Works	3,294 9 4	5,824 2 9	12,871 5 4	9,217 4 3	9,775 0 9	8,175 2 8	3,139 4 3	11,392 0 11	6,861 2 3	3,662 13 3	4,535 3 4	1,237 4 6	86,005 6 4
B.—ESTABLISHMENT.													
I.—Salaries—													
a Conservators	17,951 2 8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17,951 2 8
b. Superior Officers	853 5 4	2,500 0 0	7,725 12 10	5,738 11 4	8,088 1 0	8,400 0 0	1,800 0 0	6,486 10 8	6,525 12 11	4,200 0 0	1,800 0 0	.....	52,098 6 1
c Subordinate forest and depôt establishments	.....	959 8 0	3,693 2 0	3,223 4 6	4,018 15 9	2,775 14 6	1,137 5 3	3,596 0 0	3,481 14 6	3,910 4 11	360 0 0	1,244 0 0	28,460 5 5
d Office establishments	4,932 0 0	492 14 0	1,145 5 9	1,008 0 0	1,008 0 0	564 0 0	439 0 0	1,027 3 6	1,006 0 0	1,006 3 0	456 0 0	.....	13,084 10 3
e Deputation and special allowances	.....	.....	2,100 0 0	.....	.....	174 3 1	.....	.....	.....	.....	.....	.....	2,274 3 1
II.—Travelling Allowances—													
a Conservators	2,704 1 2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,704 1 2
b. Superior Officers	.....	1,130 14 0	3,178 14 0	1,607 10 6	1,847 12 2	1,135 3 6	840 9 0	2,249 5 0	1,137 13 3	685 12 0	503 2 0	.....	14,217 3 6
c Subordinate forest and depôt establishments	.....	301 10 0	732 6 8	490 14 0	578 2 0	514 4 0	240 12 0	705 0 0	1,052 5 9	511 9 0	199 5 0	.....	5,324 4 5
d Office establishments	18 1 6	32 13 0	.....	.....	18 0 0	.....	10 10 6	.....	.....	19 1 0	.....	.....	96 10 0
III.—Contingencies—													
a Stationery	2 4 0	0 2 0	13 14 0	.....	.....	.....	.....	3 8 0	2 0 0	10 0 0	0 12 0	.....	32 8 0
b. Carriage of tents and records	10 2 6	15 4 0	18 0 0	30 2 0	2 12 0	.....	2 6 0	9 1 6	.....	18 2 0	.....	.....	105 14 0
c. Rents, rates, and taxes	360 0 0	270 0 0	.....	36 0 0	56 4 0	.....	.....	51 8 0	27 0 0	51 12 0	.....	.....	852 8 0
d. Pay of police guards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e Official postage	397 6 6	52 7 0	216 13 6	44 8 0	147 1 6	130 11 6	74 0 6	185 4 0	99 13 6	147 6 6	214 10 6	.....	1,710 3 0
f Sundries	228 10 3	129 3 0	348 10 0	278 15 3	175 9 9	92 13 0	39 13 3	176 4 8	166 6 6	226 15 0	61 11 3	8 7 0	1,930 6 11
Total B.—Establishments	27,457 1 11	5,884 11 0	19,172 14 9	12,455 1 7	15,940 11 8	11,787 6 7	4,584 8 6	14,469 13 4	13,499 2 8	10,787 1 8	3,596 8 9	1,252 7 0	1,40,886 5 6
Grand Total of Expenditure	36,751 11 3	11,708 13 9	32,044 4 1	21,672 5 10	25,715 12 0	19,962 9 3	7,723 12 9	25,861 14 3	20,360 5 0	14,449 15 1	8,130 12 1	2,489 11 6	2,26,891 14 10

CALCUTTA:

The 5th June 1888.

JAMES TAYLOR,

Assistant Comptroller-General (Forests).

FORM 59.

FOREST DEPARTMENT, ASSAM.—ACCOUNT CURRENT FOR THE YEAR 1887-88.

Dr.

	Rs. As. P.	Rs. As. P.
To Cash Balance	.....	1,132 5 3
„ VIII. Assessed Taxes, income-tax, deductions from salaries	.....	2,113 4 7
Revenue as per Annual Summary, Form No. 58.	.....	2,67,311 12 0
„ Service Funds—		
Civil Fund Ordinary, Bengal	.....	.....
„ Additional, Bengal	.....	.....
Military Fund Bengal	.....	.....
„ „ Madras	.....	.....
„ Orphan Fund, Bengal	.....	.....
Uncovenanted Service Family Pension Fund, Bengal.	.....	595 1 0
General Family Pension Fund	.....	.....
Hindu Family Annuity Fund	.....	.....
„ Deposits	.....	.....
„ Forest Cash Remittances, Local—		
Forest cheques drawn	2,19,167 11 1	.....
Inter-Divisional Transfers	4,606 8 2	2,23,764 3 3
„ Advances recoverable	.....	89,594 9 5
„ Suspense	.....	108 8 0
„ Account Current (other Governments)—		
Remittances from Government of India.	.....	3,060 12 1
„ Inter-Departmental Transfers—		
Public Works Department, State Railways.	50 12 0	.....
Ditto other Branches	805 15 11	.....
Military Department, Bengal	465 13 2	.....
Civil Department— Rs. As.		
Jail 29 5		
Mathematical Instrument Department. 469 9		
Miscellaneous 1,297 0		
Survey 190 5	1,986 8 0	2,808 12 1
Total	.....	5,90,489 8 8

Cr.

	Rs. As. P	Rs. As. P.
By Expenditure as per Annual Summary Form No. 58.	.....	2,26,891 14 10
„ Deposits	.....	.....
„ Forest Cash Remittances, Local—		
Remittances to Treasuries	2,63,237 3 2	
Inter-Divisional Transfers	4,606 8 2	2,67,843 11 4
„ Advances Recoverable	.....	87,454 3 6
„ Suspense	.....	129 13 0
„ Account Current (other Governments)—		
Remittances to the Government of India.	557 5 4	
Remittances to the Government of North-West Provinces and Oudh.	9 0 0	566 5 4
„ Inter Departmental Transfers—		
Public Works Department other Branches	3,841 11 1	.....
Military Department Bengal	48 8 0	.....
Civil Department—		
Rs. As. P		
Jail 5 0 0		
Police 267 3 6		
Mathematical Instrument Department. 1,017 8 0		
Survey 68 5 0		
Miscellaneous 528 0 0		
Telegraph 10 8 0	1,896 8 6	5,786 11 7
„ Cash Balance	.....	1,816 8 1
Total	.....	5,90,489 8 8

CALCUTTA:
The 5th June 1888.

JAMES TAYLOR,
Assistant-Comptroller-General (Forests).

FORM No. 60.

FOREST DEPARTMENT, ASSAM.—REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1887-88.

Division.	Particulars.	Outsandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the Department at end of year.
		Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Direction	Price of timber and other produce.	.....	3 3 4	3 3 4	3 3 4	.....
Working plans	Ditto ditto	.....	1,212 0 0	1,212 0 0	1,212 0 0	.....
Gáro Hills	Ditto ditto	2 300 0 9	30,730 12 11	33,030 13 8	23,652 5 2	9,378 8 6
Goálpára	Ditto ditto	16,874 0 0	58,826 8 2	75,700 8 2	39,852 0 2	35,848 8 0
Kámrúp	Ditto ditto	7,706 8 0	51,486 1 3	59,192 9 3	46,352 1 3	12,840 8 0
Darrang	Ditto ditto	1,471 11 2	28,032 15 1	29,504 10 3	29,504 10 3	.....
Nowgong	Ditto ditto	7 12 0	8,652 3 11	8,659 15 11	8,618 7 11	41 8 0
Sibságar	Ditto ditto	682 0 0	11,040 0 2	11,722 0 2	11,686 8 2	35 8 0
Lakhimpur	Ditto ditto	19,414 14 6	27,738 3 6	47,153 2 0	29,249 2 0	17,904 0 0
Cachar	Ditto ditto	3,187 9 9	46,474 11 3	49,662 5 0	39,408 1 6	10,254 3 6
Sylhet	Ditto ditto	465 0 0	35,652 8 9	36,117 8 9	36,117 8 9	.....
Khási and Jaintia Hills.	Ditto ditto	.....	1,655 11 6	1,655 11 6	1,655 11 6	.....
Nága Hills	Ditto ditto	.....	.....	.....	.....	.....
	Total	52,109 8 2	3,01,504 15 10	3,53,614 8 0	2,67,311 12 0	86,302 12 0

FORM No. 61.

FOREST DEPARTMENT, ASSAM.—OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1887-88.

Division	Department Debtor			Department Creditor.			Balance due.	
	At Commencement of year	Recoveries in cash and value of supplies and work done during the year.	At close of year	At commencement of year	Payments made during year.	At close of year.	To Department (Outstandings.)	By Department (Liabilities.)
	Rs. As. P.	Rs. As. P.	Rs. As. As.	Rs. As. P.	Rs As. P	Rs As. P.	Rs As. P.	Rs. As. P.
Direction	.....	1,075 1 3	1,075 1 3	.....	1,475 1 3	1,475 1 3	400 0 0	.....
Goálpára division	.....	13,836 5 8	13,836 5 8	148 10 5	12,716 11 3	12 865 5 8	29 0 0	.....
Sibsagar ditto	.....	8,006 12 7	8,006 12 7	819 3 3	8,360 15 8	9,080 3 1	1,073 6 6	.....
Lakhimpur ditto	1 10 8	8,571 4 5	8,572 15 1	343 3 4	8,726 9 5	8,970 1 9	413 9 10	16 7 2
Cachar ditto	.....	2,702 6 9	2,702 6 9	511 13 9	2,614 12 6	3,126 10 3	424 3 6	.....
Gáro Hills ditto	.....	16,798 13 11	16,798 13 11	4,702 6 9	15,739 10 6	16,452 1 3	1,653 3 4	.....
Kámrúp ditto	.....	13,984 13 6	13,984 13 6	355 1 0	14,536 0 6	14,891 1 6	906 4 0	.....
Darrang ditto	.....	10,471 4 3	10,471 4 3	621 10 0	9,940 4 6	10,561 14 6	90 10 3	.....
Nowgong ditto	.....	1,104 8 7	1,104 8 7	200 6 0	1,363 12 4	1,564 2 4	459 9 9	.....
Nága Hills ditto	.....	.....	.....	.....	.....	.....	.....	.....
Khási and Jaintia Hills division.	.....	.....	.....	.....	.....	.....	.....	.....
Sylhet division	.....	8,892 5 6	8,892 5 6	278 13 9	8,919 11 6	9,198 8 3	306 2 9	.....
Working plans	.....	5,150 13 0	5,150 13 0	.....	5,170 10 1	5,170 10 1	19 13 1	.....
Total	1 10 8	89,594 9 5	89,596 4 1	7,881 8 5	87,454 3 6	95,335 11 11	5,755 15 0	16 7 2

CALCUTTA:
The 5th June 1888.

JAMES TAYLOR,
Assistant-Comptroller-General (Forests).

FORM No. 62.

Forest Department, Assam.—Financial Results of the year 1887-88.

Division.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges	Charges.	Receipts	Charges.
	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.
Direction	.....	.....	3	16,627	20,125	3	36,752
Working Plans	.....	.....	1,212	3,551	8,158	1,212	11,709
Gáro Hills	1,475	4,149	22,177	12,077	15,818	23,652	32,044
Goálpára	20	.....	39,832	7,824	13,848	39,852	21,672
Kámrúp	302	.....	46,050	9,780	15,936	46,352	25,716
Darrang	157	71	29,348	6,603	13,288	29,505	19,962
Nowgong	278	21	8,340	2,840	4,863	8,618	7,724
Sibságar	814	90	10,873	14,783	10,989	11,687	25,862
Lakhimpur	.....	.....	29,249	10,706	9,674	29,249	20,380
Cachar	314	10	39,094	6,166	8,274	39,408	14,450
Sylhet	412	.....	35,706	6,226	1,905	36,118	8,131
Khási and Jaintia Hills	.....	.....	1,656	626	1,864	1,656	2,490
Total	3,772	4,341	2,63,540	97,811	1,24,740	2,67,312	2,26,892

Appendix I.

Register of Reserved Forests in the Province of Assam added during 1887-88.

Date of entry.	Name of reserve.	Civil district and sub-division of district.	Number and date of notification sanctioning the reserve.	Area in acres.	Boundaries.	Statement of rights.	Remarks.
13th April 1887.	Diphu reserve ..	Nága Hills, Borpathar mauza.	No. 25, dated the 13th April 1887.	42,080	West.—The Dipupani from its exit from the Nága Hills to its junction with the Dhunsiri river, thence down the latter to its junction with the Bokajan. North and East.—The Bokajan from its junction with the Dhansiri river to its exit from the Nága Hills. South.—The foot of the Nága Hills from the exit of the Bokajan to the exit of the Dipupani from the Nága Hills.		
Ditto	Rengma reserve.	Ditto	Ditto	34,400	West.—The Rengmapani from its exit from the Nága Hills to its junction with the Dayang river. North.—The Dayang river from its junction with the Rengmapani to its exit from the Nága Hills. East and South —The foot of the Nága Hills from the exit of the Dayang river to the exit of the Rengmapani.		
27th May 1887	Jokai reserve ...	Lakhimpur, Jokai, and Kotoha.	No. 32, dated the 27th May 1887.	11,858	West.—From boundary mound No. 30, along the Gelekijan to the Sessa stream; then up this stream to boundary-mound No. 31: from this point along the boundary of the Ballai Tea Estate to boundary-mound No 39 on the Senglijan; thence down this stream to its junction with the Sessa stream; and from hence up the latter to boundary-mound No. 1 at the western end of the northern boundary. North —The boundary of the Sessabari tea-garden (grant No 14) from boundary-mark No. 1 on the Sessa stream in the west to boundary-mark No. 6 in the east, on the path going from Sessabari tea-garden to the Jokai village. East —From boundary-mound No. 6 along path to boundary-mound No. 9, and from thence a survey line running south to boundary-mound No. 22 on the Dehing river. South.—The Dehing river from boundary-mark No 22 down the river to boundary-mark No. 23, thence a survey line running in a south westerly direction to boundary-mound No. 30 on the Gelekijan		The following rights of way have been admitted in this reserve:— (1) Path leading from Bolai tea-garden to Bolai village. (2) Path leading from Bolai village to the Sessa river near Lepetkata pathar. (3) Path leading from Kosomari Bil near the Dehing to Khamptigaon and Bolaigaon. The inhabitants of Bolai and Khampti villages have been granted the privilege of grazing their cattle on the two dolonies crossed by the above path No. 2

5th August 1887.	Bharalwa reserve.	Lakhimpur, Bharalwa mauza.	No. 48, dated 5th August 1887.	5,280	North.—The Hinnijan from the point where it crosses the Rajgarh Ali in the west to its junction with the Ranga nadi. East.—The Ranga nadi from its junction with the Hinnijan to boundary-mark No. 16 of a demarcated line. South.—A demarcated survey line from boundary-mark No. 16 to boundary-mark No. 1 at the Hingora nadi, thence up this nadi to its junction with the Rangajan, thence up the latter stream to the point where it crosses Rajgarh Ali. West.—The Rajgarh Ali from the point where it crosses the Rangajan to the point where it crosses the Hinnijan as marked in the revenue survey map of 1870-71.		
Ditto.	Kaliani reserve...	Nága Hills, Barpathar mauza	No. 47, dated the 5th August 1887.	51,840	North and East.—Up a small stream from its junction with the Tarapung nadi at point A, as marked on the map, to its source on the Kheliabinabon Peak, then along the ridge extending from this peak in an easterly direction to another peak about two miles distant, and from this along a ridge in a south-easterly direction to the Ripage nadi, and down this to its junction with a small tributary south of Guashen Peak, and up this stream to Guashen Peak, thence in a northerly direction to the Burchan Nadi, and down the latter to its junction with the Kaliani river. South.—Up the Kaliani river from its junction with the Burchan nadi, to its junction with another tributary stream, and up the latter to its source on the Sethung Peak, thence along the main ridge of the hills in a south-westerly direction over Bogrisan Peak, to another peak on which the source of a tributary stream of the Jaheuri nadi is, and down this stream to its junction with the Jaheuri nadi at point B, as shown on the map. West.—The Jaheuri nadi from the point B, as marked on the map, to its junction with the Kaliani river, and up this river to its junction with the Tarapung nadi, thence up the latter to the point A, as marked on the map.	.....	The inhabitants of Kaliani village have been granted the privilege of grazing their cattle in this reserve and of fishing in the Kaliani river during the pleasure of Government. There are eight very small villages, the inhabitants of which have been allowed to remain until they may wish to change their village sites, as they are obliged to do every few years when selecting new land for *jhúming*; the latter mode of cultivation in the reserve has been strictly prohibited.
25th November 1887	Second addition to the Kholahat reserve.	Nowgong, Mahal Datipar, Duar Amli Parbat.	No. 63, dated 25th November 1887.	14,970	North and East.—A survey line skirting the cultivation of Nelli, Dahaligaon, and Dharapani from point A in the west to boundary-mark No. 110 of the present Kholahat reserve; then along the southern boundary of the latter to boundary-mark No. 104; thence again a survey line running south of the Kulikusi Tea Estate and village cultivation to point L, near Amchugaon, on the Balikusi road; thence along this road to the Balikusi grant and along its boundary to point N; thence a survey line running in a north-easterly direction to point O, near the Balikusi village, and in a south-easterly direction to point P, as shown on the map.	.....	The Chief Commissioner has granted the privileges of grazing cattle and obtaining unreserved timber and firewood from this forest for a period of 20 years, subject to renewal hereafter, if necessary, to the inhabitants of the undermentioned 15 villages:— 1. Khola comprising Khuplang Kachi, Gobhaligaon, and Kacharigaon. 2. Barparagaon. 3. Darapani. 4. Dahaligaon. 5. Makariagaon. 6. Nelly. 7. Khoapur. 8. Balichora. 9. Marjang. 10. Sohori. 11. Bhalukmari. 12. Amsaigaon. 13. Bura Rajagaon 14. Kemarugaon. 15. Balikuchi.

Appendix 1.—(*Continued.*)

Register of Reserved forests in the Province of Assam added during 1887-88.

Date of entry.	Name of reserve.	Civil district and sub-division of district.	Number and date of notification sanctioning the reserve.	Area in acres.	Boundaries.	Statement of rights.	Remarks.
					South and West.—A survey line running in a south-westerly direction from point P, as shown on the map, to point Q on the Kakna Dong nadi, thence down this nadi to point R; thence a survey line running in a westerly direction to point S, on the Sohari Dong nadi; thence along the foot of the hills to point T, on the Amsarli nadi, and down this stream to point U, at its junction with a small tributary stream, and up the latter to point V, near Mokhu village; thence a survey line running in a south-westerly direction to point W, and from there in a north-westerly direction to point X at the Trunk Road, and along the latter to point Y; thence again a survey line running in a northerly direction to point A, as shown on the map.	.....	
13th December 1887.	Addition to the Doboka reserve.	Nowgong, Duar Katiatoli.	No. 65, dated 13th December 1887.	28,498	North.—The Haya nadi from its exit from the hills at point A to its source; thence along a footpath to point B, near the Rangkegaon village; thence by survey lines to point C, and along another footpath to point D, as shown on the map. East.—A survey line running in a southerly direction from point D to point E, at the north-east corner of the Dikharu grant, and along the boundary of this grant to point F. South.—The boundary of the present Doboka reserve from point F to boundary-mark No. 1; thence a survey line running in a westerly direction to point G, west of the Burigunga nadi, and along the foot of the hills on to point H, on the boundary of the Rengbeng grant near the Doboka road. West.—The boundary of the Rengbeng grant from point H to point I; thence the Sakunbahi road to point J and the boundary of the Sakunbahi grant to point K; thence along the foot of the hills to point A, as shown on the map.	.....	The Chief Commissioner has allowed the inhabitants of the undermentioned three villages, comprising 31 houses, inhabited by 72 people, to remain in the reserve until they may wish to change their village sites, as they are obliged to do every few years when selecting new land for *jhuming*; the latter mode of cultivation in the reserve has been strictly prohibited. 1. Hargaon. 2. Taranghegaon. 3. Moirabanggaon.

26th January 1888.	Angarátali reserve.	Gáro Hills, Mauza No. 1.	No. 3, dated 26th January 1888.	9,138	East.—The Gumra stream from its source at boundary-mark No. 20 down its course to boundary-mark No. 1, near the village Duanrikura, situated near the boundary of Gáro Hills district. South.—A series of straight survey lines from boundary-mark No. 1 to boundary-mark No. 19, as shown in the map. West.—From boundary-mark No. 19 on the eastern bank of Dabua stream, following its course northwards to its junction with the Somauchi stream. North.—The Somauchi stream from its junction with the Dabua stream to its source at boundary-mark No. 20, as shown on the map.		A small area of 16 bighas of leased rupit land (pattas No. 237 and 238), and two houses with their sites, all belonging to Bancha and Watha Garos, are included in this reserve.
20th February 1888.	Kadam reserve.	Lakhimpur, Kadam mauza.	No. 8, dated 20th February 1888.	13,626	North.—Down the Muri Ghagor nadi from boundary-mark No. 1 to its junction with the Namajeejan; thence the latter stream to boundary-mark No. 2 at the northern extremity of the eastern boundary as shown in the map. East.—A survey line running from boundary-mark No. 2 on the Namajeejan to boundary-mark No. 3 on the Luporajan; thence down this stream to its junction with the Bheonijan; thence down the latter stream to its junction with the Goonasuti; thence down the latter stream to the point where it crosses the road from North Lakhimpur, as marked in the revenue survey map of 1870-71. South.—The North Lakhimpur road from the point where it cuts the Goonasuti to the point where it crosses the Muri Ghagor nadi. West.—Up the Muri Ghagor nadi from the point where it is crossed by the North Lakhimpur road to its junction with the Kadam nadi, thence up the latter stream to boundary-mark No. 4, thence a survey line running in a north-easterly direction to boundary-mark No. 1 on the Muri Ghagor nadi.	.....	The inhabitants of the village of Dyaniya have been granted the privilege of keeping their existing houses four in number and seven granaries where they are within this reserve as long as they please to do so, and to graze their cattle.
23rd March 1888.	Upper Dehing reserve.	Lakhimpur, Chapatali, Powai, and Makum mauzas.	No. 12, dated 23rd March 1888.	148,691	North.—The Tingrai river from point A at the boundary of the Tingrai village in the west to the Dum Duma Makum road; thence along this road in a northerly direction to the Dibru river; thence up the latter stream to point B on the Pangrigarh as shown in the map signed by the Forest Settlement Officer and deposited in the office of the Secretary to the Chief Commissioner of Assam. East.—The Pangrigarh from point B in the north to point C, where it crosses the Monmoh nadi as shown on the map signed by the Forest Settlement Officers and deposited in the office of the Secretary to the Chief Commissioner of Assam.	.....	The privilege of cutting Toko-pat, the leaves of *Livistona Jenkinsiana* in this forest has been granted by the Chief Commissioner to the inhabitants of villages Moongaon, Neltamgaon, Manmock, Khamtigaon, and Powaigaon for ten years. The privilege of using the bank of the Dehing river within this reserve for towing boats and for encamping and lighting fires has also been granted by the Chief Commissioner for the same period of ten years to all travellers.

Appendix I.—(*Continued.*)

Date of entry.	Name of reserve.	Civil district and sub-division of district.	Number and date of notification sanctioning the reserve.	Area in acres.	Boundaries.	Statement of rights.	Remarks.
					South.—Along the Monmoh nadi from point C where it cuts the Pangrigarh down to Monmoh Pathar near point D, thence skirting the Monmoh Pathar in the east, north, and west to point E, at a stream flowing into the Monmoh nadi, thence along this stream to point F, thence in a westerly direction along a survey line bounding the cultivation of Khamtigaon to point G on the Tarakasijan; thence bounding the cultivation of Dibong village to point H on the Garumarájáń; thence bounding the cultivation of Surugaon along the same survey line in a south-westerly direction crossing the railway line near point I to point K on a small stream, thence along this stream crossing the Makum road at point L to Powai beel, thence bounding the Powai beel as far as a small stream at point M; thence in a north-westerly direction to a small stream flowing into the Powai nadi; thence down the Powai nadi to point N; thence in a straight line in a south-westerly direction to point O on the Dehing river; thence down that river to point P at its junction with the Thung Thung nadi, as shown in the map signed by the Forest Settlement Officer and deposited in the Office of the Secretary to the Chief Commissioner of Assam. West.—Up the Thung Thung nadi from its junction with the Dehing river at point P in the south to point Q bearing north-east; thence a survey line running in a north-westerly direction to point R on the Rajgarh Ali, and along the latter to point S; thence the boundary of the Bozaloni tea-garden to point T on the Rajgarh Ali, and again along the latter to point U; thence a straight line in a north-easterly direction to point V on the Kketakjan; thence along the latter to where it crosses the Rajgarh Ali, and along the Rajgarh Ali to point W; thence a survey line skirting the lands of the Tingrai village to point A on the Tingrai river, as shown on the map signed by the Settlement Officer and deposited in the Office of the Secretary to the Chief Commissioner of Assam.		A small private tea-garden of a few acres situated on the right bank of the Digboi nadi about two miles east of the western boundary is included in this reserve

24th March 1888.	Sankos reserve...	Goálpára, Ripu Duár.	No. 13, dated 24th March 1888.	28,800	North.—The Bhutan boundary from the Sankos river to the Jakati or Ranga river, prisms Nos. 50 to 53. East.—The Jakati or Ranga river from the Bhutan boundary down to the district road known as the North Trunk Road. South.—The district road known as the North Trunk Road from the Jakati or Ranga river to the Sankos river. West.—The west bank of the Sankos river from the district road or North Trunk Road up to the Bhutan boundary.		
Ditto	Muktaigaon reserve.	Ditto.	Ditto.	3,200	North.—The district road known as the North Trunk Road from the Sankos river east to mound No. 1. East.—First by a survey line from mound No. 1 to mound No. 2, on a Jhora (a branch of the Harapatha Jhora), thence natural boundary along this Jhora to mound No. 3. South.—A survey line from mound No. 3, west, to mound No. 4, on the Sankos river, both banks. West.—West bank of the Sankos river from mound No. 4 to district road, or North Trunk Road.		

Appendix II.

STATEMENT SHOWING THE CLEARING OF BOUNDARY-LINES AND REPAIRING OF BOUNDARY-MOUNDS AND THE INSPECTION DONE BY THE DIVISIONAL OFFICER IN EACH RESERVED AND PROTECTED FOREST DURING THE YEAR 1887-88.

Names of divisions and forests.	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1887-88.		Length of artificial boundaries and demarcated natural boundaries not cleared in 1887-88.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1887-88.	Total number of boundary-marks not repaired in 1887-88.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.		Total length of artificial boundaries and demarcated natural boundaries not inspected by the divisional officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
GÁRO HILLS DIVISION.													
Dibru Hill reserve	7	10	5	48	1	42	9	.....	9	6	50	.....	40
Jinari	8	46	.....	.....	8	46	5	.....	5	8	46	.....	.....
Chima and Bangshi	17	39	.....	.....	17	39	30	.....	30	17	39	.....	.....
Dhima	11	31	.....	.....	11	31	18	.....	18	11	31	.....	.....
Dalma	4	75	.....	.....	4	75	10	.....	10	4	75	.....	.....
Raja Simla	5	69	.....	.....	5	69	5	.....	5	5	69	.....	.....
Ildek	5	30	.....	.....	5	30	10	.....	10	5	30	.....	.....
Dambu	9	78	.....	.....	9	78	27	.....	27	9	78	.....	.....
Darugiri	4	72	.....	.....	4	72	12	.....	12	4	72	.....	.....
Rongrengiri	14	28	.....	.....	14	28	46	.....	46	14	28	.....	.....
Emangiri	4	25	.....	.....	4	25	8	.....	8	.....	.....	4	25
Rewak	3	55	.....	.....	3	55	6	.....	6	.....	.....	3	55
Siju	2	22	.....	.....	2	22	6	.....	6	.....	.....	2	22
Bolsalgiri	2	32	.....	.....	2	32	9	.....	9	2	32	.....	.....
Tura	1	15	.....	.....	1	15	7	.....	7	1	15	.....	.....
Songsak	17	....	.....	.....	17		80	.....	80	17	.....	.....	.....
Bagmara	...	15	.....	.....	.....	15	.....	.....	.....	.....	.....	.....	15
Angaratali	5	31	5	31	.....	.....	20	.....	20	.....	.....	5	31
Total	126	33	10	79	115	34	308	.....	308	110	5	16	28
GOÁLPÁRA DIVISION.													
Bijni Duár reserve	14	40	.....	.....	14	40	59	.....	59	14	40	.....	.....
Chirang duar „ (eastern part)	7	55	7	55	.....	.....	29	29	.....	7	55	.....	..
„ „ (western part) ...	5	35	5	35	.....	.....	26	26	.....	5	35	.....	.....
Ripu Duár reserve	5	.....	5	.....	.....	.....	19	19	.....	5	.....	.....	.....

Guma Duar reserve ...	...	...	6	.....	6	.....	.....	.....	38	38	.....	6	.....	.....	.....
Sidli „ „ ...	...	...	27	.....	27	.....	.....	.....	67	67	.....	27	.....	.....	.....
Panhari and Pechadaveri reserve	...	...	8	10	8	10	.....	.....	40	40	.....	8	10	.....	.....
Bengtol and Darogaon „	...	...	3	60	3	60	.....	.....	17	17	.....	3	60	.....	.....
Bhumeswar Hill ...	...	...	11	10	11	10	.....	.....	57	57	.....	11	10	.....	.....
Bhur reserve ...	...	...	8	40	8	40	.....	.....	39	39	.....	8	40	.....	.....
Muktaigaon „ ...	...	...	7	.....	7	.....	.....	.....	5	5	.....	7	.....	.....	.....
Total ...	...	...	104	10	89	50	14	40	396	337	59	104	10	.....	.....
KÁMRÚP DIVISION.															
Barduar reserve ...	...	...	56	45	56	45	.....	.....	197	197	.....	51	55	4	70
Pantan „ ...	...	...	55	5	55	5	.....	.....	131	131	.....	51	55	3	30
Kulsi reserve ...	...	...	16	5	16	5	.....	.....	37	37	.....	13	5	3	.....
Milmillia reserve ...	...	...	24	45	24	45	.....	.....	124	124	.....	20	30	4	15
Mayang „ ...	...	...	26	20	26	20	.....	.....	148	148	.....	26	20	.....	.....
Chhaygaon reserve ...	...	...	17	2	17	2	.....	.....	83	83	.....	13	42	3	40
Kukurmara depôt ...	...	...	1	8	1	8	.....	.....	12	12	.....	1	8	.....	.....
Jara reserve ...	...	...	6	20	6	20	.....	.....	28	28	.....	5	40	.....	60
Kawa Sing reserve ...	...	...	16	8	16	8	.....	.....	72	72	.....	16	8	.....	.....
Rani reserve ...	...	...	35	.....	35	.....	.....	.....	143	143	.....	34	40	.....	40
Mataikhar ...	...	...	14	47	12	7	2	40	63	63	.....	8	52	5	75
Hajo ...	...	...	2	64	2	64	.....	.....	19	19	.....	2	64	.....	.....
Simla Hill reserve ...	...	...	4	50	4	50	.....	.....	23	23	.....	4	50	.....	.....
Dumpara „ ...	...	...	5	60	5	60	.....	.....	34	34	.....	5	60	.....	.....
Khaksi Sikrabura Hill ...	...	...	18	.....	18	.....	.....	.....	140	140	.....	18	.....	.....	.....
Ghoraputa reserve ...	...	...	3	30	3	30	.....	.....	26	26	.....	3	30	.....	.....
Khatkhati „ ...	...	...	8	60	8	60	.....	.....	53	53	.....	8	60	.....	.....
Taraibari „ ...	...	...	7	.....	7	.....	.....	.....	50	50	.....	7	.....	.....	.....
Garubaldha „ ...	...	...	3	30	3	30	.....	.....	22	22	.....	3	.....	.....	30
Khurkhuri „ ...	...	...	2	40	2	40	.....	.....	20	20	.....	2	40	.....	.....
Sursuria „ ...	...	...	6	.....	6	.....	.....	.....	29	29	.....	6	.....	.....	.....
Gizang „ ...	...	...	5	.....	5	.....	.....	.....	35	35	.....	5	.....	.....	.....
Jaypur „ ...	...	...	7	21	7	21	.....	.....	48	48	.....	7	.....	.....	21
Baradobha „ ...	...	...	7	20	7	20	.....	.....	46	46	.....	7	.....	.....	20
Nampathar „ ...	...	...	5	60	5	60	.....	.....	30	30	.....	5	60	.....	.....
Barjuli „ ...	...	...	9	.....	9	.....	.....	.....	45	45	.....	8	.....	1	.....
Buragohain reserve ...	...	...	4	47	4	47	.....	.....	30	30	.....	.....	47	4	.....
Mugakhal „ ...	...	...	1	68	1	68	.....	.....	14	14	.....	.....	.....	1	68
Jharikhuri protected forest ...	...	...	8	65	8	65	.....	.....	55	55	.....	8	65	.....	.....
Total ...	...	...	380	20	377	60	2	40	1,757	1,757	.....	346	31	33	69

Appendix II.—(*Continued.*)

Names of divisions and forests.	Total length of artificial boundaries and demarcated natural boundaries.		Length of artificial boundaries and demarcated natural boundaries cleared in 1887-88.		Length of artificial boundaries and demarcated natural boundaries not cleared in 1887-88.		Total number of boundary-marks.	Total number of boundary-marks repaired in 1887-88.	Total number of boundary-marks not repaired in 1887-88.	Total length of artificial boundaries and demarcated natural boundaries inspected by the Divisional Officer.		Total length of artificial boundaries and demarcated natural boundaries not inspected by the Divisional Officer.	
	Miles.	Chains.	Miles.	Chains.	Miles.	Chains.				Miles.	Chains.	Miles.	Chains.
Darrang Division.													
Balipara reserve	2	40	2	40	.....	.....	49	49	.....	2	40	...	.....
Charduar plantation "	17	10	17	10	.....	.....	1	1	.....	17	10	.....	.....
Garumari "	1	65	1	65	.....	.....	39	39	.....	1	65	.....	.....
Singri Hill "	.....	29	.....	29	.....	.....	5	5	.....	.....	29	.....	.....
Khalingduar "	7	30	7	30	.....	.....	34	34	...	7	30	.....	.....
Total	29	14	29	14	.....	.....	128	128	.....	29	14	.....	.....
Nowgong Division.													
Kholahat reserve	31	68	31	68	.....	.....	360	360	.....	31	68	.....	.....
Doboka "	30	58	30	58	.....	.....	142	142	.....	30	58	.....	.....
Diju Valley "	25	5	25	5	.....	.....	281	181	100	25	5	.....	.....
Suang "	6	53	6	53	.....	.....	36	36	.....	6	53	.....	.....
Bamuni "	6	23	6	23	.....	.....	17	17	.....	6	23	.....	.....
Rongkhong "	2	40	2	40	.....	.....	10	10	.....	.....	.....	2	40
Sonaikusi "	9	40	9	40	.....	.....	80	80	.....	9	40	.....	.....
Proposed Duar Jangthang	3	.....	3	.....	.....	.....	11	11	.....	3	.....	.....	.....
Total	115	47	115	47	.....	.....	937	837	100	113	7	2	40

Sibságar Division.													
Mikir Hills reserve	35	.....	35	.....	.....	.....	25	25	.....	32	.....	3	.....
Holongapur „	11	60	11	60	.....	.....	32	27	5	11	60	.....	.....
Diroi „	17	45	17	5	.....	40	58	58	.....	17	5	.....	40
Abhaipur „	18	20	6	40	11	60	30	30	.....	6	40	11	60
Upper Daigurung reserve	7	40	7	40	.....	.....	11	11	.....	7	40	.....	.....
Lower „ „	4	40	4	40	.....	.....	10	10	.....	4	40	.....	.....
Sola „	8	40	7	.....	1	40	66	59	7	7	.....	1	40
Desai „	18	55	18	55	.....	.....	21	20	1	18	55	.....	.....
Thowráh proposed „	5	.....	5	.....	.....	.....	12	12	.....	5	.....	.....	.....
Doyang „ „	13	.....	13	.....	.....	.....	20	20	.....	13	.....	.....	.....
Total	139	60	126	.....	13	60	285	272	13	123	.....	16	60
Lakhimpur Division.													
Upper Dehing reserve	38	48	38	48	.....	.....	145	145	.....	36	40	2	8
Dehingumkh „	2	40	2	40	.....	.....	4	4	.....	2	40	.....	.....
Jokai „	9	.....	9	.....	.....	.....	39	39	.....	9	.....	.....	.....
Jaipur „	16	55	14	75	1	60	49	49	.....	13	11	3	44
Kadam „	3	30	3	30	.....	.....	46	46	.....	3	30	.....	.....
Bharalwa „	1	30	1	30	.....	.....	16	16	.....	1	30	.....	.....
Railway concession	41	.....	.....	.....	41	.....	53	.....	53	.....	.....	41	.....
Total	112	43	69	63	42	60	352	299	53	65	71	46	52
Cachar Division.													
Upper Jiri reserve	8	30	8	30	.....	.....	72	72	.....	7	29	1	1
Lower „ „	3	32	3	32	.....	.....	36	36	.....	3	32	.....	.....
Barak „	15	13	15	13	.....	.....	161	161	.....	15	13	.....	.....
Sonai „	10	59	10	59	.....	.....	75	75	.....	10	59	.....	.....
Katakhal „	19	69	19	69	.....	.....	234	234	.....	19	69	.....	.....
Dhaleswari „	10	46	10	46	.....	.....	66	66	.....	9	77	.....	49
Inner Line „	1	10	1	10	.....	.....	10	10	.....	.....	.....	1	10
Mupa Mahur protected forests	.....	73	.....	.....	.....	73	.....	.....	.....	.....	.....	.....	73
Langting Mupa	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....
Total	71	12	69	19	1	73	654	654	.....	66	39	4	53
Grand Total	1,078	79	888	12	190	67	4,817	4,284	533	958	17	120	62

Appendix III.

Area Statement of the Darugiri Forest, Northern Range, Gáro Hills Division, Assam.

Compartment.	Sub-compartment.	Area of Sál forests in acres				Mixed forest.	Bamboo forest.	Grass land.	Total area.	Remarks.
		Class 1.	Class 2.	Class 3.	Total.					
1	*a*	.....	.....	.....	.....	...	...	79·3	79 3	Areas of big streams are not shown in this table. They amount to 10·2 acres. Total area of the reserve is 2,448 acres.
	b	13·2	.....	.....	13·2	...	...	...	13·2	
	c	.....	.....	115·8	115·8	...	...	...	115·8	
	d	32·6	.....	.....	32·6	...	...	...	32·6	
	Total	45·8	.....	115·8	161·6	...	...	79·3	240·9	
2	*a*	.....	.....	.....	.....	78 8	...	...	78·8	
	b	.....	.....	7·9	7·9	...	...	...	7·9	
	c	11·2	.....	.....	11·2	...	...	...	11 2	
	Total	11·2	.....	7·9	19 1	78 8	...	...	97 9	
3	*a*	.....	.....	85·5	85·5	...	...	...	85·5	
	b	.....	58·5	.....	58·5	...	...	...	58·5	
	c	20·0	.....	.....	20·0	...	...	...	20·0	
	Total	20·0	58·5	85·5	164·0	...	...	...	164 0	
4	.....	.....	.....	75·4	75·4	...	...	...	75·4	
	Total	.....	.....	75·4	75·4	...	...	...	75·4	
5	*a*	.....	.....	90·2	90·2	...	...	...	90 2	
	b	.....	.....	.....	.....	...	...	38·3	38 3	
	Total	.....	.....	90·2	90·2	...	...	38·3	128·5	
6	*a*	.....	.....	135·2	135·2	...	...	...	135·2	
	b	.....	10·5	.....	10·5	...	...	...	10·5	
	Total	...	10·5	135·2	145·7	...	...	...	145·7	
7	*a*	.....	.....	58·8	58·8	...	...	...	58·8	
	b	.....	.....	.....	.....	...	...	7·3	7·3	
	Total	.....	.....	58·8	58·8	...	..	7·3	66·1	
8	*a*	.....	.....	29·4	29·4	...	...	...	29·4	
	b	.....	14·7	.....	14·7	...	...	...	14 7	
	Total	.....	14·7	29·4	44 1	...	...	...	44·1	
9	*a*	.....	96·0	.....	96·0	..	...	...	96·0	
	b	162·9	.....	.....	162·9	...	...	...	162·9	
	Total	162·9	96·0	.....	258·9	...	...	...	258·9	
10	*a*	.....	.....	34 8	34·8	...	...	...	34·8	
	b	78·7	.....	.....	78 7	...	...	...	78·7	
	Total	78·7	.....	34·8	113·5	...	...	...	113·5	
11	*a*	40·0	.....	.....	40·0	...	...	...	40·0	
	b	.....	.....	19·3	19·3	...	...	...	19·3	
	Total	40·0	.....	19·3	59 3	...	...	...	59 3	
12	*a*	.....	.....	.....	.....	...	44·4	...	44·4	
	b	154·9	.....	.....	154 9	...	...	...	154·9	
	c	.....	89·8	.....	89·8	...	...	...	89·8	
	d	.....	28 6	.....	28·6	...	...	...	28·6	
	Total	154·9	118 4	.....	273·3	...	44·4	...	317·7	
13	*a*	.....	.....	58·2	58·2	...	...	...	58·2	
	b	.....	.....	.....	.....	...	...	49 4	49·4	
	Total	.....	.....	58·2	58·2	...	...	49·4	107 6	
14	.....	.....	.....	102·5	102·5	...	...	...	102·5	
	Total	.....	.....	102·5	102 5	...	...	...	102 5	
	Carried over.	513·5	298·1	813·0	1,624·6	78·8	44·4	174·3	1,922·1	

Appendix III. -(*Concluded.*)

Compartment	Sub-compartment.	Area of Sâl forests in acres.				Mixed forest.	Bamboo forest.	Grass land.	Total area.	Remarks
		Class 1.	Class 2.	Class 3	Total					
	Brought forward	513 5	298 1	813 0	1,624 6	78 8	44 1	174 3	1,922 1	
15	*a*	... ..	... .	.... .	.. . .	...	...	14 0	14 0	
	b	60 4	.....	. ...	60 4	...	...	...	60 4	
	c	.....	.....	.....	.....	...	...	8 9	8 9	
	Total	60 4	... ..	.....	60 4	...	...	22 9	83 3	
16	*a*	.....	... ..	.....	. ...	...	..	28 5	28 5	
	b	116 6	.....	.....	116 6	...	...	...	116 6	
	Total	116 6	... ..	.....	116 6	...	...	28 5	145 1	
17	*a*	.....	15 8	.....	15 8	...	...	...	15 8	
	b	.....	.....	.....	.....	...	...	3 8	3 8	
	Total	.....	15 8	.....	15 8	...	...	3 8	19 6	
18	.....	142 8	.....	.....	142 8	...	. .	...	142 8	
	Total	142 8	.....	.....	142 8	...	...	...	142 8	
19	....	.....	.....	.....	.....	...	...	101 1	101 1	
	Total	.....	.....	.....	.....	...	...	101 1	101 1	
20	.....	.....	.....	.....	. ...	...	...	23 8	23 8	
	Total	.....	.....	.....	.....	...	...	23 8	23 8	
	Grand Total ..	833 3	313 9	813 0	1 960·2	78 8	44 4	354 4	2,437 8	

C. P. FISHER,
Assistant-Conservator of Forests.

Appendix IV.

Statement showing results of valuation surveys carried on in the Darugiri Forest, Northern Range, Gáro Hills Division, Assam.

Compartment.	Sub-compartment.	All trees.										Other Timber-trees.				
		Under 9'.	From 9" to 18".	From 18" to 3'-0".	From 3' to 4'-6".	From 4'-6" to 6'-0".	From 6'-0" to 7'-6".	From 7'-6" to 9'-0".	From 9'-0" to 10' 6".	From 10' 6" to 12' 0".	Over 12'-0".	Under 18".	From 18" to 3'-0".	From 3'-0" to 4'-6".	From 4'-6" to 6'-0".	Over 6'-0".
1	b	9	18	25	26	18	7	5	1	...	...	97	49	39	7	5
	c	227	70	23	23	21	18	12	5	3	1	6,482	784	120	49	31
	d	7	...	13	29	32	27	14	8	...	1	871	190	92	59	24
		142	165	41	19	21	18	10	4	...	1	943	195	54	34	30
	a	204	124	119	41	31	17	4	...	...	...	3,997	707	204	77	34
	b & c	51	38	73	103	112	40	14	...	...	...	4,622	593	236	51	10
4		13	6	2	4	5	4	1	1	...	...	3,223	801	201	74	44
5	a	70	63	21	13	15	6	2	...	1	...	4,428	749	201	87	44
6		63	40	39	45	32	9	7	1	1	...	7,881	1,143	296	106	81
7		61	26	5	11	14	12	5	4	1	...	5,932	671	119	44	24
8		10	3	4	10	5	11	3	2	3	...	2,656	333	85	27	20
9		273	422	709	613	384	128	51	32	11	5	15,717	3,459	731	247	115
10	a	31	62	57	9	6	3	2	..	...	...	5,599	850	219	80	37
	b	292	546	576	353	164	41	12	...	1	...	2,211	728	108	8	6
11	a	441	645	445	240	75	13	3	...	...	...	1,459	255	35	3	2
	b	133	171	193	29	3	1	1	...	...	...	648	105	26	4	1
12	b	291	370	575	534	318	85	16	2	...	...	6,280	1,232	334	75	37
	c	296	280	301	232	102	33	15	2	2	...	2,274	304	47	16	5
	d	13	31	80	96	45	11	...	...	..	...	1,294	205	69	18	4
13		194	111	128	59	29	12	1	1	...	...	3,094	788	112	39	19
14		385	418	355	169	105	51	11	4	...	...	2,537	928	220	72	28
15		233	221	101	116	84	37	8	1	...	..	1,413	271	66	22	4
16		615	1,511	1,362	572	224	91	14	3	...	...	2,810	846	190	37	9
17		34	31	17	6	8	3	5	..	1	...	389	94	15	8	2
18		104	167	340	361	333	130	35	10	2	...	6,636	1,256	304	90	37
Total ...		4,192	5,539	5,604	3,713	2,186	811	251	81	26	8	93,493	17,536	4,123	1,334	653

C. P. Fisher,

Assistant-Conservator of Forests.

Appendix V.

Table showing the Result of counting the Concentric Rings in 25 Sál-trees in Darugiri Reserve, Gáro Hills Division, Assam.

Number of trees.	Circumference @ 4½′ above soil.	Length of bole.	Concentric rings. Inches from centre.	Rings in inches of radii 1	2	3	4	Mean number of rings in one radius.	Mean radius in inches and decimals.	Remarks.
1	4½″	15′ 1	1	6	5	5	5	5 25	...	Sound. Length of radii 1, 2, 3, and 4, is ⅛″, ⅛″, ⅛″, and ⅛″ respectively.
			Total...	6	5	5	5	5 25	0·44	
2	4½″	11′ 2″	1	8	9	10	9	9·00	...	Sound. Length of radii 1, 2, 3, and 4, is ⅛″, ⅛″, ⅛″ and ¼″ respectively.
			Total...	8	9	10	9	9 00	0·72	
3	4½″	21′ 4″	1	8	8	10	8	8·50	...	Slight heartshake. Length of radii 1, 2, 3, and 4, is ¾″, ¾″, ⅞″, and ¾″ respectively.
			Total...	8	8	10	8	8 50	0 78	
4	4½″	23′ 4″	1	8	9	9	7	8 25	...	Sound. Length of radii 1, 2, 3, and 4, is ⅛″, ⅛″, ⅞″, and ¾″ respectively.
			Total...	8	9	9	7	8·25	0 72	
5	13½″	23′ 5″	1	11	10	10	10	10 25	...	Sound.
			2	4	4	4	5	4 25	...	Radius 1 heartwood 1⅛″ Total 1⅜″
			Total...	15	14	14	15	14·50	1 44	" 2 " 1″ " 1⅜″
										" 3 " 1″ " 1⅜″
										" 4 " 1″ " 1⅜″
6	13½″	37′ 6″	1	11	10	11	11	10·75	...	Heartshake.
			2	5	6	5	6	5·50	...	Radius 1 heartwood 1″ Total 1⅛″
			Total...	16	16	16	17	16·25	1·50	" 2 " 1″ " 1⅛″
										" 3 " 1″ " 1⅛″
										" 4 " 1¼″ " 1⅜″
7	13½″	35′ 6″	1	5	11	8	12	9 00	...	Big hole in centre which causes a loss of ½″ and ½″ to 1st inch of radii 1 and 3.
			2	7	8	5	11	7·75	...	Radius 1 heartwood ¾″ Total 1⅛″
			Total...	12	19	13	23	16·75	1 66	" 2 " ¾″ " 1⅛″
										" 3 " ¾″ " 1⅛″
										" 4 " 1″ " 1⅛″
8	25″	47′ 5″	1	11	12	13	13	12 25	...	Sound.
			2	11	11	11	10	10·75	...	Radius 1 heartwood 1⅞″ Total 2⅜″
			3	7	5	11	10	8·25	...	" 2 " 2″ " 2½″
			4	...	...	5	4	2 25	...	" 3 " 2¾″ " 3⅛″
			Total...	29	28	40	37	33 50	3 00	" 4 " 2¼″ " 3⅜″
9	25½″	45′ 8″	1	11	7	4	10	8 00	..	Decayed at centre, 1st inch of radii 2 and 3 lose ⅜″ and ¾″ respectively. Hence small No. of rings.
			2	10	11	10	10	10·25	...	
			3	8	5	9	10	8·00	...	
			4	...	..	...	8	2 00	..	Radius 1 heartwood 2⅛″ Total 3″
			Total...	29	23	23	38	28 25	3 31	" 2 " 1⅞″ " 2⅞″
										" 3 " 2⅛″ " 3″
										" 4 " 3¼″ " 3⅞″
10	27″	57′ 3½″	1	11	12	11	12	11·50	...	Sound.
			2	12	10	11	11	11·00	...	Radius 1 heartwood 1⅞″ Total 3⅛″
			3	10	11	11	6	9 50	...	" 2 " 3″ " 4⅛″
			4	3	9	...	...	3 00	...	" 3 " 1¾″ " 3″
			5	...	5	...	...	1·25	...	" 4 " 1⅛″ " 2⅛″
			Total...	36	47	33	29	36·25	3·34	
11	27½″	41′ 2″	1	12	12	12	11	11·75	...	Slight heartshake
			2	11	10	10	9	10 00	...	Radius 1 heartwood 2⅞″ Total 3⅜″
			3	11	9	10	10	10·00	...	" 2 " 2⅞″ " 3⅛″
			4	6	5	4	2	4 25	...	" 3 " 2″ " 3⅛″
										" 4 " 1⅞″ " 3⅛
			Total...	40	36	36	32	36 00	3 37	
12	28½″	56′ 4½″	1	9	9	11	11	10 00	..	Sound.
			2	11	9	11	11	10 50	...	Radius 1 heartwood 3″ Total 3¾″
			3	11	11	12	12	11·50	...	" 2 " 2⅞″ " 3⅛″
			4	7	5	7	4	5·75	...	" 3 " 3⅛″ " 3¾″
										" 4 " 2⅞″ " 3⅛″
			Total...	38	34	41	38	37 75	3 59	
13	44½″	72′ 8″	1	10	11	11	11	10·75	...	Sound
			2	9	10	10	9	9 50	...	Radius 1 Heartwood 4½″ Total 5⅜″
			3	9	9	9	9	9·00	...	" 2 " 5″ " 6
			4	9	10	10	10	9·75	...	" 3 " 5⅛″ " 6⅛″
			5	9	9	10	9	9 25	...	" 4 " 4½″ " 5⅛″
			6	3	10	9	5	6 75	...	
			7	...	...	5	...	1 25	..	
			Total...	49	59	64	53	56 25	5 84	

Number of trees.	Circumference @ 4½′ above soil.	Length of bole.	Concentric rings. Inches from centre.	Rings in inches of Radii. 1	2	3	4	Mean number of rings in one radius.	Mean radius in inches and decimals.	Remarks.
14	45″	47′ 10½″	1	...	11	10	11	8·00	...	Radius 1, was not counted because that side of the tree was decayed
			2	...	10	10	9	7·25	...	
			3	...	9	10	9	7·00	...	Radius 1 heartwood 6⅜″ Total 7½″
			4	...	9	9	9	6·75	...	" 2 " 4⅜″ " 5¼″
			5	...	9	10	10	7·25	...	" 3 " 5″ " 5⅝″
			6	...	4	6	6	4·00	...	" 4 " 5″ " 5½″
			Total...	...	52	55	54	40·25	6·02	
15	45″	49′ 6″	1	...	4	...	6	2·50	...	Decayed at centre, by which 1st inches of radii 1 and 3, part of 1st inches of radii 2 and 4, and of 2nd inch of radius 3, are lost.
			2	11	12	6	13	10·50	...	
			3	12	11	10	14	11·75	...	
			4	10	12	11	14	11·75	...	Radius 1, Heartwood 6¼″ Total 7¼″
			5	11	14	13	15	13·25	...	" 2 " 4¾″ " 5¾″
			6	11	13	4	11	9·75	...	" 3 " 4⅞″ " 5¼″
			7	12	...	...	...	3·00	...	" 4 " 4¾″ " 5¾″
			7¼	4	...	...	...	1·00	...	
			Total...	71	66	44	73	63·50	6·00	
16	45″	54′ 0″	1	10	10	12	11	10·75	...	Sound.
			2	13	11	9	12	11·25	...	Radius 1 heartwood 5½″ Total 6½″
			3	12	12	12	11	11·75	...	" 2 " 4½″ " 5½″
			4	12	10	12	12	11·50	...	" 3 " 6″ " 6½
			5	11	9	11	12	10·75	...	" 4 " 5¾″ " 6½″
			6	12	5	13	14	11·00	..	
			6¼	7	...	6	7	1·75	...	
			Total...	77	57	75	79	72·00	6·25	
17	45″	56′ 0″	1	14	9	14	9	11·50	...	Sound.
			2	11	12	13	10	11·50	...	Radius 1 heartwood 6¼″ Total 7¾″
			3	10	10	13	9	10·50	...	" 2 " 3¾″ " 4¼″
			4	11	13	11	10	11·25	...	" 3 " 3¾″ " 4¼″
			5	11	10	12	13	11·50	...	" 4 " 4¼″ " 6¼″
			6	11	...	...	13	6·00	...	
			7	11	...	...	3	3·50	...	
			7¾	7	...	...	...	1·75	...	
			Total...	86	54	63	67	67·50	5·88	
18	46″	61′ 1″	1	14	9	12	12	11·75	...	Slight Heartshake.
			2	10	13	11	10	11·00	...	In radius 2 the 1st inch is lost.
			3	11	11	12	10	11·00	...	Radiifs 1 heartwood 5¼″ Total 6¼″.
			4	9	12	11	11	10·75	...	" 2 " 3⅞″ " 5⅜″.
			5	11	11	11	9	10·50	...	" 3 " 4″ " 5⅛″.
			6	11	4	2	11	7·00	...	" 4 " 6″ " 6⅞″.
			6¾	10	...	...	10	5·00	...	
			Total...	76	60	59	73	67·00	6·02	
19	45″	68′ 10″	1	12	12	12	11	11·75	...	Sound
			2	11	11	11	12	11·25	...	Radius 1 heartwood 5⅜″ Total 6″.
			3	11	11	11	13	11·50	...	" 2 " 5½″ " 6½″.
			4	12	11	11	13	11·75	...	" 3 " 6¼″ " 7¼″.
			5	11	11	11	12	11·25	...	" 4 " 4⅞″ " 5⅛″.
			6	11	11	11	7	10·00	...	
			7	...	4	11	...	3·75	...	
			8	..	...	4	...	1·00	...	
			Total...	68	71	82	68	72·25	6·29	
20	62″	63′ 5″	1	12	9	9	8	9·50	...	Slight heartshake.
			2	10	11	11	10	10·50	...	Radius 1 heartwood 8¼″ Total 10″.
			3	10	10	10	10	10·00	...	" 2 " 7¾″ " 8¾″.
			4	11	11	12	9	10·75	...	" 3 " 6¾″ " 8″.
			5	10	12	10	10	10·50	...	" 4 " 7¾″ " 9¼″.
			6	11	12	11	10	11·00	...	
			7	11	12	11	9	10·75	...	
			8	9	13	9	9	10·00	...	
			9	9	8	...	10	6·75	...	
			10	...	...	...	2	0·50	...	
			Total...	93	98	83	87	90·25	9·00	
21	63″	64′ 6″	1	11	10	11	10	10·50	...	Sound.
			2	13	13	12	12	12·50	...	Radius 1 heartwood 8″ Total 10″.
			3	12	12	10	10	11·00	...	" 2 " 7″ " 9″.
			4	9	8	13	15	11·25	...	" 3 " 6⅛″ " 7¾″.
			5	11	13	11	10	11·25	...	" 4 " 6″ " 8″.

Appendix V.—(*Concluded.*)

Number of trees.	Circumference at 4½′ above soil.	Length of bole.	Concentric rings. Inches from centre.	Rings in inches of radii. 1	2	3	4	Mean number of rings in one radius.	Mean radius in inches and decimals.	Remarks.
			6	12	11	8	8	9·75	...	
			7	9	9	11	11	10·00	...	
			8	9	10	5	4	7·00	...	
			9	9	8	...	...	4·25	...	
			10	6	..	...	...	1·50	...	
			Total...	101	94	81	80	89·00	8·69	
22	63″	85′ 2″	1	6	4	6	5	5·25	...	Hole in centre 1″ diameter. No decay.
			2	10	10	9	8	9·25	...	Radius 1 heartwood 7″ Total 9½″.
			3	9	10	12	9	10·00	...	" 2 " 6½″ " 8″.
			4	12	11	11	10	11·00	...	" 3 " 7⅛″ " 9″.
			5	9	10	10	9	9·50	...	" 4 " 7¼″ " 8¼″.
			6	14	12	10	12	12·00	..	
			7	12	12	10	12	11·50	...	
			8	11	8	8	12	9 75	...	
			9	10	...	5	3	4 50	...	
			9½	4	...	...	...	1·00	...	
			Total...	97	77	81	80	83·75	8·69	
23	64½″	64′ 4″	1	10	8	9	10	9·25	...	Slight heartshake.
			2	9	11	10	10	10·00	...	Radius 1 heartwood 8½″ Total 10½″.
			3	10	11	11	9	10·25	...	" 2 " 7¾″ " 8¾″.
			4	9	9	10	10	9 50	...	" 3 " 6⅞″ " 7⅞″.
			5	10	9	11	9	9·75	...	" 4 " 8¾″ " 9¾″.
			6	10	9	10	9	9·50	...	
			7	9	9	11	10	9·75	...	
			8	9	10	8	10	9·25	...	
			9	9	8	...	10	6 75	...	
			10	9	...	...	9	4·50	...	
			11	2	...	...	...	0·50	...	
			Total...	96	84	80	96	89·00	9 16	
24	81″	82′ 2″	1	11	10	13	11	11·25	...	Slgith heartshake.
			2	10	13	10	10	10·75	...	Radius 1 heartwood 12½″ Total 13½″.
			3	11	12	10	10	10·75	...	" 2 " 9¾″ " 11¼″.
			4	10	12	10	10	10·50	...	" 3 " 8⅛″ " 9⅛″.
			5	8	12	11	10	10 25	...	" 4 " 9½″ " 10½
			6	9	11	10	10	10 00	...	
			7	9	9	14	9	10·25	...	
			8	11	10	12	11	11·00	...	
			9	10	10	15	13	12·00	...	
			10	10	11	7	14	10·50	...	
			11	10	11	...	8	5·25	...	
			12	9	10	..	...	4·75	...	
			13	11	...	...	...	2·75	...	
			13½	7	...	...	...	1·75	...	
			Total...	136	131	112	116	123·75	11·19	
25	81″	92′ 0″	1	9	7	9	10	8·75	...	Slight heartshake.
			2	10	9	11	11	10·25	...	Radius 1 heartwood 12½″ Total 13¾″.
			3	11	10	11	11	10·75	...	" 2 " 9⅛″ " 10⅛″.
			4	11	9	11	11	10·50	...	" 3 " 10⅛″ " 11⅛″.
			5	9	8	9	7	8 25	...	" 4 " 10½″ " 11¾″.
			6	11	9	10	8	9·50	...	
			7	11	9	10	9	9·75	...	
			8	10	8	9	8	8·75	...	
			9	10	12	10	9	10·25	...	
			10	10	11	9	11	10·25	...	
			11	10	6	11	13	10·00	...	
			12	10	...	7	8	6·25	...	
			13	12	...	...	...	3·00	...	
			13¾	6	...	...	...	1·50	...	
			Total...	140	98	117	116	117·75	11 87	

C. P. FISHER,
Assistant-Conservator of Forests.

Appendix VI.

Statement showing the result of the measurement of the heights of Sâl-trees in the Darugiri Reserve Northern Range, Gáro Hills Division, Assam.

Number of trees.	Circumference at 4′ 6″ above soil.		Length of bole.	
1	0′	4½″	15′	1″
2	0′	4½″	11′	2″
3	0′	4½″	21′	4″
4	0′	4½″	23′	4″
5	1′	1¼″	23′	5″
6	1′	1½″	37′	6″
7	1′	1½″	35′	6″
8	1′	3¾″	27′	8½″
9	1′	4½′	36′	2½″
10	1′	4½″	37′	0″
11	1′	8″	41′	7¼″
12	1′	8″	46′	8½″
13	2′	1″	47′	5″
14	2′	1½″	45′	8″
15	2′	1½″	45′	6″
16	2′	3″	57′	3½″
17	2′	3″	43′	3¾″
18	2′	3½″	41′	2″
19	2′	4½″	56′	4½″
20	2′	6″	50′	2½″
21	3′	4½″	59′	1¼″
22	3′	6″	63′	3¼″
23	3′	7″	68′	1¼″
24	3′	8″	72′	8″
25	3′	9″	47′	10½″
26	3′	9″	49′	6″
27	3′	9″	54′	0′
28	3′	9″	56′	0″
29	3′	9″	61′	1″
30	3′	9′	68′	10″
31	3′	10½″	65′	9¾″
32	3′	11″	67′	1¼′
33	4′	5″	66′	8½″
34	4′	5½″	64′	1¼″
35	5′	0″	58	0″
36	5′	2½″	63′	5″
37	5′	3″	64′	6″
38	5′	3″	85′	2″
39	5′	3″	61′	7¼″
40	5′	3″	71′	7¼″
41	5′	4½″	81′	11″
42	5′	4½″	64′	4″
43	5′	6½″	75′	1¼″
44	5′	9″	83′	7¼″
45	6′	9″	82′	2″
46	6′	9″	92′	0″
47	7′	8″	74′	0″
48	8′	5″	94′	11′
49	8′	7″	70′	3¾″
50	10′	3½″	90′	0′

C. P. FISHER,
Assistant-Conservator of Forests.

Appendix VII.

KULSI PLANTATION MEMORANDUM.

Counting and measurement of trees of the different species, details of expenditure incurred and table showing the rainfall in 1887-88.

RUBBER PLANTATION.

Eastern Block Compartments, 1873 to 1877.

Area 88 acres.

Number of dominant trees measured.	Average height.	Average girth.
100	38 feet.	3 feet 1 inch.

The measurements of the largest and finest are :—

Number	Height.	Girth.	
		Feet.	Inches.
1	46	4	2
2	48	3	3
3	48	4	0
4	48	4	4
5	49	5	6
6	43	4	7
7	49	4	1
8	47	4	8
9	53	3	0
10	47	4	2

This block was divided into four compartments; the result of countings in each compartment was as follows, *viz.* :—

Number of compartment.	Number alive.	Number of vacancies.	Total.
1	412	25	437
2	700	26	726
3	845	11	856
4	450	8	458
Total	2,407	70	2,477

The Tun or Poma trees in this block were also counted, and found to be 14,580 in number, which were sown and transplanted in 6 seed and 50 planting beds respectively containing 108 lines.

Number of dominant trees.	Average height.	Average girth.	
	Feet.	Feet.	Inches.
50	31	1	2

The measurements of the largest and finest are :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	44	2	1½
2	44	1	8½
3	47	2	4½
4	46	1	11
5	45	1	9½

These trees were sown in 1878. There are 180 planted bamboo clumps in this block. The total expenditure for the year was Rs. 91-14.

WESTERN BLOCK.

Compartment, 1878.

Area 13 acres.

Number of dominant trees measured.	Average height Feet.	Average girth.	
		Feet.	Inches.
50	49	3	9½

Amongst the finest and largest are the following:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	51	4	4
2	56	5	0
3	54	8	0
4	56	4	5
5	64	3	9
6	55	6	0
7	52	4	7
8	47	4	3
9	49	5	7
10	56	5	8

Number alive.	Number of vacancies.	Total.
428	4	432

In this compartment were found 98 bamboo clumps.
The expenditure during the year in this compartment has been Rs. 7-1-6.

COMPARTMENT, 1883.

Area 21 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	22	1	1¾

The ten largest and finest measured as follows:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	33	2	2
2	35	3	3
3	33	2	5
4	33	1	11
5	33	2	3½
6	31	2	½
7	31	1	7½
8	31	3	0
9	29	2	1½
10	25	1	8

Number alive.	Number of vacancies.	Total.
1,071	33	1,104

There are 359 bamboo clumps in the compartment and 3 Ceara Rubber-trees with an average height of 28 feet and girth of 1 foot and ½ inch.
The expenditure was Rs. 54-7-11.

COMPARTMENT, 1884.

Area 26·55 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	20	1	¼

The measurements noted below are those of the finest in this compartment, *viz.*—

Number.	Height. Feet.	Girth. Feet	Girth. Inches.
1	25	1	3
2	26	1	2
3	22	1	3½
4	24	1	2
5	27	1	4
6	23	1	2
7	24	1	3
8	24	1	6
9	23	1	6
10	23	1	4

Number alive.	Number of vacancies.	Total.
1,164	282	1,446

There are 11 Ajhar seed beds with an average length of 290 feet and width of 4 feet.
These plants are averaging 10 feet in height and 2¾ inches in girth. The size of the best one is 10 feet in height and 3½ inches girth.
The expenditure in this compartment during the year has been Rs. 116-3-5.

TEAK PLANTATION.

COMPARTMENT, 1872.

Area 8·75 acres.

Number of dominant trees measured.	Average girth. Feet.	Average girth. Inches.
50	2	10

The following are among the finest and largest:—

Number.	Height. Feet.	Average girth. Feet.	Average girth. Inches.
1	67	4	1½
2	77	2	6
3	81	3	1½
4	76	2	9½
5	80	2	7¼
6	78	3	6½
7	76	3	0
8	73	4	4½
9	72	3	10
10	74	3	2

In this compartment there are 80 Pithecolobium Samon trees of an average height of 42 feet and girth of 1 foot 6¼ inches.

There was no expenditure during the year.

COMPARTMENT, 1873.

Area 33 acres.

Number of dominant trees measured.	Average girth. Feet.	Average girth. Inches.
50	2	3¾

Amongst the largest and finest are the following:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	70	3	½
2	62	2	6
3	68	2	3½
4	65	2	2
5	64	2	5½
6	72	3	2
7	69	2	7½
8	67	2	8¾
9	74	2	6
10	70	2	6½

There are also 49 Pithecolobium Samon trees of an average height of 43 feet and girth of 1 foot 7½ inches.

There was an expenditure of Re. 1-2 on planting bamboos in this compartment.

COMPARTMENT, 1874.

Area 17 acres.

Number of dominant trees measured.	Average girth. Feet.	Average girth. Inches.
50	2	8

The following are amongst the best:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	68	3	4½
2	75	3	2½
3	73	3	0¼
4	77	2	10¾
5	76	2	10¼
6	80	3	8¾
7	74	2	11¼
8	78	3	4¼
9	69	3	1
10	82	4	2

The expenditure on this compartment was Rs. 6-4 during the year.

COMPARTMENT, 1875.

Area 60 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	56 feet.	2 feet 2 inches.

The following trees are the finest and largest:—

Number.	Height Feet.	Girth. Feet.	Girth. Inches.
1	78	3	3¾
2	83	2	11¼
3	80	3	4
4	78	3	3
5	77	2	5½
6	82	3	1¾
7	75	3	6¼
8	75	3	1
9	73	4	0½
10	70	2	10

There are numerous Sam seedlings and some Nahor and Ajhar plants also.
The expenditure was Rs. 36-7-6.

COMPARTMENT, 1878.

Area 20 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	56 Feet.	1 feet 11¾ inches.

The following ten trees measured are the best and largest :—

Number.	Height Feet.	Girth. Feet.	Girth. Inches.
1	65	2	0½
2	65	3	6
3	59	2	1
4	58	2	6½
5	65	2	9¼
6	62	2	2
7	59	2	3¼
8	63	2	3¾
9	59	2	6
10	62	2	0½

In this compartment there are also some Ajhar and Amari plants.
The expenditure on the compartment of 1878 has been Rs. 14-5-6 during the year.

COMPARTMENT, 1879.

Area 10 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	43 feet.	1 feet 3½ inches.

The following ten trees are the largest and best :—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	47	1	5¾
2	47	1	7
3	49	1	6½
4	47	1	8
5	50	1	7
6	46	1	7
7	50	1	8½
8	50	1	6½
9	48	1	5½
10	47	1	5

The Tun trees in this compartment were also measured, and the results noted below :—

Number of dominant trees measured.	Average height.	Average girth.
50	38 feet.	1 feet 2¾ inches.

The following measurements were taken of the finest :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	45	1	10
2	49	2	2½
3	43	1	6
4	44	1	4
5	45	1	5½
6	41	1	5
7	46	1	4¾
8	43	1	2
9	44	1	5
10	43	1	0

There are four Ceara Rubber-trees left in this compartment averaging 27 feet in height and 7 inches in girth, also 3 Pithecolobium Samon trees of an average height of 10 feet and 2¾ inches in girth.

An expenditure of 4 annas only was incurred during the year in this compartment.

COMPARTMENT, 1881.

Area 20 acres.

Number of dominant trees measured.	Average height.	Average girth.
50	41 feet.	1 feet 3¾ inches.

The following are the best and largest in this compartment :—

Number.	Height.	Girth.	
	Feet.	Feet.	Inches.
1	50	1	9
2	47	1	5½
3	48	1	6
4	50	1	10
5	49	1	7½
6	48	1	10½
7	48	1	11
8	45	1	8
9	46	1	6½
10	46	1	9½

The following trees are also found in this compartment, *viz.*: —

270 Pithecolobuim Samon trees of an average height of 42 feet and girth 2 feet 3 inches, which were planted along both sides of the Hatigarh and Chanchalpara district road.

The Sisu-trees measured as follows:—

Number.	Height. Feet.	Girth.	
		Feet.	Inches
1	34	1	0
2	34	1	1
3	27	0	9½
4	37	1	1
5	30	0	11
6	31	0	9½
7	28	0	11½
8	32	0	10¼
9	29	0	10¼
10	34	1	1½

The Ajhar-trees were also measured, and gave the following results, *viz.*:—

Number	Height. Feet.	Girth.	
		Feet.	Inches.
1	30	1	2
2	27	0	11
3	29	1	1
4	31	1	0
5	30	0	11½
6	27	0	10
7	30	1	1½
8	29	1	0
9	30	0	11
10	29	0	10

110 Khair-trees were counted, and ten of these were measured as follows:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	36	1	0½
2	27	0	9¾
3	27	0	9
4	31	0	10¼
5	27	0	9
6	45	1	5
7	37	1	6½
8	33	1	3
9	22	0	7¼
10	18	0	6

Besides the above, there are some Sonaru (*Cassia fistula*) and Sam-trees. The sum of Rs. 13-2-6 was expended during the year on the improvement of this compartment.

Sisu Plantation, 1873.

Area 20 acres.

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	39	1	9

The following ten are the best:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	47	1	10
2	43	2	0
3	47	2	3
4	47	2	3¼
5	48	2	7
6	43	1	11½
7	51	2	3¾
8	43	1	10
9	44	2	1½
10	42	2	4

The Tun-trees in this plantation were also measured:—

Number of dominant trees measured.	Average height. Feet.	Average girth. Feet.	Average girth. Inches.
50	48	2	9¼

Amongst the best are the following:—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	53	3	7
2	56	2	11¾
3	50	3	5
4	53	2	11¾
5	56	2	9¾
6	58	2	2
7	56	4	0
8	54	3	8
9	55	3	0½
10	57	3	4

In this compartment are also 91 Ajhar seed-beds averaging 267 feet in length and 4 feet in width.

The size of the best trees is 13 feet in height and 5½ inches in girth. The sum of Rs. 75-14-8 was expended in this compartment chiefly in clearing jungle in the Ajhar-lines and clearing creepers.

Bamboo Plantation, 1882.

Area 2 acres.

There are now 284 clumps of bamboos of the following species, *viz*:—

	Clumps.
Jati	250
Jao	22
Bijuli	12
Total	284

The average number of bamboos in each clump is 50, 33, 110 of each kind and 10, 3, and 50 were cut respectively on an average from each clump. The total number of bamboos cut during the year for departmental use was—

Jati and Jao	1,250
Bijuli	250

The expenditure during the year was Rs. 2 for supervising. The total expenditure on this plantation to end of 1887-88 has been Rs. 347.

Cinchona Plantation, 1885.

Compartment No. 1.

	Alive.	Dead.	Total.
	11	284	295

Compartment No. 2.

	79	144	223

Compartment No. 3.

	19	29	48
Total	109	457	566

Average height of the dominant trees is 6 feet and girth 2¼ inches.
There are also 4 Ceara Rubber plants, averaging 19 feet in height and 3¼ inches in girth.
The expenditure during the year was Rs. 5-14-6.

Jubilee Plantation.

This is a small plot planted with different kinds of bamboos and canes. A sum of Rs. 4-9 was expended during the year on it.

Nurseries.

The following are the results of the countings made in the different rubber nurseries, *viz.*:—

Rubber nursery No. 1	602
" " 2	407
" " 3	5,412
Total	6,421

Those in nursery No. 3 are all from seed, and measure from 16 feet to 28 feet in height and from 5¾ inches to 1 foot 11 inches in girth.

Broussonetia Papyrifera.

Nursery No. 1.

This nursery contains now only 118 Paper Mulberry-trees of an average height of 29 feet and girth 1 foot. Also five plants of *Musa textilis* in three clumps, and two Ceara Rubber plants of an average height of 28 feet by 10 inches in girth.

Nursery No. 2.

Here were found in counting 26 Paper Mulberry plants averaging 12 feet in height and 4¾ inches in girth.

Nursery No. 3.

Here are 190 Paper Mulberry plants of an average of 20 feet in height and 8 inches in girth.

Miscellaneous.

Bungalow Hill.

The two Maipak-trees now measure 54 feet in height each, and have girths of 2 feet 9½ inches and 1 foot 7 inches. There are also 10 Pithecolobium Saman trees of an average height of 42 feet and girth 3 feet and ½ inch, and 7 Ceara Rubber-trees, of which the best are as follows :—

Number.	Height. Feet.	Girth. Feet.	Girth. Inches.
1	39	1	1
2	38	0	9
3	21	1	0
4	50	2	7
5	39	0	10

Of the Castilloa Elastica plants only two survive, and 14 Landolphias.
There are 61 Rubber-trees and 33 Bhaluka bamboos planted alongside the district road.

The expenditure on plantation work at Kulsi during the year was—

		Rs.
1.	Rubber—	
	Old or eastern block, 88 acres	92
	New or western block, 60·55 acres	178
2.	Teak (Compartment 1873 to 1881, 160 acres.)	72
3.	Sisu ... 20 acres ...	76
4.	Miscellaneous, avenue-planting, &c.	42
5.	Experiments and exotic trees, *viz.*,—	
	Cinchona, *Broussonetia papyrifera*, *Musa textilis*, Ceara Rubber, African and American Rubber, including nurseries ...	42
6.	Establishments	240
	Grand Total as per summary	742

Table of annual rainfall at Kulsi plantation:—

	1886-87.	1887-88.
April	5·28	7·99
May	8·59	6·91
June	16·26	24·14
July	26·39	9 75
August	10·19	12 50
September	12·56	6·88
October	2·19	·45
November	·40	Nil.
December	·21	Nil.
January	1·90	·12
February	Nil.	·83
March	3·69	3·54
	87·66	73·11

A. J. MEIN,

Deputy-Conservator of Forests, Kámrúp Division.

GAUHÁTI :

The 15th May 1888.

Appendix VIII.

CHARDUAR CAOUTCHOUC PLANTATION MEMORANDUM.

Measurement and Counting of Trees.

Compartment	Between 5 and 10 feet	Between 10 and 15 feet.	Between 15 and 20 feet.	Between 20 and 25 feet.	Between 25 and 30 feet	Between 30 and 35 feet.	Between 35 and 40 feet.	Between 40 and 45 feet.	Between 45 and 50 feet.	Over 50 feet	Vacancies.	Total.
1	3	47	141	238	409	276	103	20	14	4	3	1,258
2	10	44	156	342	331	195	86	33	42	25	...	1,264
3	1	22	113	176	186	155	101	71	90	50	18	986
4	...	16	109	220	316	340	433	227	128	171	16	1,976
5	...	4	68	326	733	486	225	57	18	3	8	1,928
6	1	3	39	174	258	352	219	71	18	6	9	1,150
7	...	3	33	80	214	349	262	100	32	11	6	1,090
8	...	25	88	128	154	147	228	111	71	73	10	1,035
9	...	46	182	241	267	158	95	20	...	...	6	1,015
10	...	6	71	151	232	208	140	26	...	...	2	836
11	...	71	529	600	334	77	10	1	...	...	19	1,640
13	1	13	189	244	58	...	...	...	...	...	2	507
14	8	55	957	319	1	...	...	...	...	...	29	1,369
April 1888	24	355	2,675	3,239	3,493	2,742	1,902	740	413	343	128	16,054
" 1887	40	1,313	4 244	3,759	3,185	2,144	792	288	166	129	13	16,073
May 1886	249	2,602	4,976	3,219	1,952	830	446	215	124	91	160	14,864
Bamoni Hill Plantation.												
April 1888	...	22	44	56	100	174	279	107	9	3	...	794
" 1887	...	26	49	58	98	173	282	904	4	...	...	794
" 1886	...	37	48	63	94	178	277	97	...	...	...	794

Heights and Girths of fifty Trees measured in each year's Plantation since 1874-75.

Year when planted.	1885-86.				1886-87.				1887-88.			
	Average height in feet.		Average girth in feet.		Average height in feet.		Average girth in feet.		Average height in feet.		Average girth in feet.	
	Feet.	Inch.	Feet.	Inch.	Feet.	Inch	Feet.	Inch.	Feet.	Inch.	Feet.	Inch.
Charduar.												
1874-75	49	0	8	11	53	3	9	0	55	10	10	8
1875-76	44	7	6	3	49	10	6	1	52	4	7	4
1876-77	46	10	4	11	47	11	5	0	52	3	6	11
1877-78	40	9	3	11	44	10	4	3	48	6	5	4
1878-79	33	10	3	4	37	7	3	5	42	2	4	1
1879-80	29	9	3	4	34	10	3	10	38	3	3	11
1880-81	24	7	1	11	28	8	2	7	32	0	3	6
Bamoni Hills.												
1874-75	36	6	2	4	40	7	3	0	42	11	3	2

Condition of Nurseries at the end of 1887-88.

Compartment number.	Area in acres.	Number of seedlings.	Height.		
			Greatest.	Average.	Least.
Old nursery in Compartment No. 2 ...	5·34	6,519	35′	15′ 0″	2′
New ditto ditto „ 2 ...	·42	4,650	20′	14′ 0″	2′
Old ditto ditto „ 3 ...	4·08	23,716	32′	16′ 9″	2′
New ditto ditto „ 3 ...	·39	3,886	25′	14′ 0″	3′
Nursery in ditto „ 9 ...	4·13	26,227	35′	18′ 9″	3′
Ditto ditto „ 10 ...	9·36	31,180	32′	14′ 11″	2′
Total	23·72	96,178	.....	.....	.....

Details of Expenditure in the Charduár Caoutchouc Plantation during 1887-88, compared with the two previous years.

Particulars.	1885-86.	1886-87.	1887-88.
	Amount.	Amount.	Amount.
	Rs. As. P.	Rs. As.	Rs. As. P.
1. Establishment	129 15 9	26 0	73 1 8
2. Plantation fence (including guards for nurseries) ...	534 10 0	726 0	741 7 0
3. Collection, carriage, sowing, and transplanting of various seedlings.	38 0 0	39 0	38 6 0
4. Clearing lines, removing of trees and stumps, repairing mounds, renewing stakes and levelling paths.	1,126 12 0	1,756 8	2,360 8 0
5. Nursery fencing and weeding drainage, &c. ...	408 12 0	3 0	1 14 0
6. Pruning of trees in lines	1 0 0	.....	2 0 0
7. Planting out Rubber-trees, (a)241, (b)372, and (c)76	(a) 28 6 0	(b) 51 0	(c) 5 0 0
8. Miscellaneous	37 2 0	15 0	12 8 0
9. Cost of completing Compartment 13 ...	199 8 0	149 14	165 9 0
10. Ditto ditto 14 ...	1,388 12 0	559 3	139 8 0
11. Repairing plantation buildings ...	24 14 0	77 13	4 0 0
12. Expenditure on ditto road ...	.....	53 4	.....
13. Weeding and clearing Nahor, Sam, Amari, and other seedlings in Compartments.	73 1 0	209 13	153 1 0
14. Cost of diverting the Mansiri Nadi ...	13 8 0	.....	.....
15. Cost of corduroyed road between 13 and 14 Compartments.	.....	323 0	78 0 0
Total ...	4,004 4 9	3,989 7 0	3,774 14 8

Rainfall at the Charduár Caoutchouc Plantation for 1887-88, as compared with the last two years.

Month.	Rainfall.		
	1885-86.	1886-87.	1887-88.
April	3·99	6·1	5·44
May	8·49	8·98	10·00
June	24·59	16·0	12·10
July	17·98	24·54	9·23
August	15·54	25·71	15·55
September	14·3	13·04	14·60
October	9·89	5·2	4·63
November	·83	·04	·07
December	2·06	·74	·00
January	·41	1·16	·83
February	·94	·79	2·33
March	1·86	2·14	4·15
Total ...	100·61	104·17	78·93

TEZPUR:
The 9th May 1888.

JAMES T. JELLICOE,
Deputy-Conservator of Forests, Darrang Division.

Appendix IX.

Experiment in tapping 50 selected Rubber-trees (Ficus elastica) in the Balipara Reserved Forest Darrang District, Assam 1888.

THIS is the sixth year in which the experimental tapping has been carried out. The work was done, as in former years, under the immediate supervision of the Divisional Officer. No incision made under 4 ft. from the ground, and no old incisions were recut. Of the six additional trees selected as stated in Appendix IX. of the Provincial Report for 1885-86, the remaining two, *viz.*, Nos. 53 and 54, were tapped again this year.

Two more trees were found to have fallen since last return No. 2 in the Sonai and No. 15 in the Kalhajuli Hills, and both were quite dead. There are thus only 44 trees remaining out of the 50 originally selected by Mr. Campbell. The six additional trees were all found, and bore no signs of having been tapped by outsiders.

Details will be found in the following tabular statement:—

Trees.	Species.	How collected.	Trees previously tapped.		Trees never tapped.		Total.	
			No. of new incisions.	Yield.	No. of new incisions.	Yield	No. of new incisions.	Yield.
				M. S. Ch.		M. S. Ch.		M. S. Ch.
44 Trees out of the 50 first selected.	Shikabar ...	Liquid ...	...	.....	5	0 7 12	5	0 7 12
	,,	Dry	8	0 6 5	16	0 8 8	24	0 14 18
	Bogibar ...	Liquid ...	1	0 1 0	...	.....	1	0 1 0
	,,	Dry	8	0 7 4	6	0 8 1½	14	0 10 5½
	Total ...	.....	17	0 14 9	27	0 19 5½	44	0 33 14½
Trees Nos. 53 and 54	Shikabar ...	Liquid ...	...	.....	1	0 4 6½	1	0 4 6½
	,,	Dry	...	.....		0 0 6		0 0 6
	Bogibar ...	Liquid ...	...	.....	1	0 4 0	1	0 4 0
	,,	Dry	...	.....		0 0 4		0 0 4
	Total ...	.....	...	.....	2	0 9 0½	2	0 9 0½
	Grand Total...	.....	17	0 14 9	29	0 28 6	46	1 2 15

The average yield, as compared with the two previous years, is given in the following statements:—

	1885-86.		1886-87.		1887-88.	
	M. S. C.	Average. S. C.		Average. S. C		Average. M, S. C S. Ch.
22 trees previously tapped, gave.	2 22 14	Old incisions. 4 10 9/11	20 trees 0 22 6½	1 1 37/40	17 trees 0 14 9	0 13 11/17
27 Ditto ditto ...	1 20 8½	New ditto 2 12½	26 ,, 0 22 10	0 12 9/13	27 ,, 0 19 5½	0 11½
49 trees gave.	4 3 6½		46 ,, 1 5 0½			
2 ,, never tapped gave	0 11 11	Ditto 5 13½	2 ,, 0 6 6½	3 3¼	2 ,, 0 9 0½	4 8¼
Total ...	4 15 1½		1 11 7		1 2 15	

There has again been a decrease in the yield of rubber, as compared with the previous year, as will be seen from the following figures:—

Yield from 44 trees—

	Srs. Chs
Ball rubber	34 5, 1887
,, ,, ...	22 6, 1888
	11 15, Decrease.
Loaf rubber	8 11, 1887
,, ,, ...	11 8½, 1888
	2 13½, Increase.
Total decrease in 1888	9 srs 1½ chs.

The decrease is most marked in the yield in ball rubber of the trees in the Sonai Hills, amounting to very nearly half, while the figures for the Sonai Hills show a decrease only of one-third. On the other hand, the yield of loaf rubber shows a small increase over the previous year.

It was observed that in many cases on cutting the main shaft of the tree, there was no exudation whatever, while the upper branches and the aërial roots gave milk freely. This tends to prove that the Rubber-trees are becoming exhausted from continuous tapping, and would also account for so many of the original trees having been blown down. The tapping of the two additional trees, Nos. 53 and 54, was far more satisfactory. The milk flowed copiously, the yield being 23 seers 10 chattacks and 16 seers 10½ chattacks respectively when in a liquid state. This on being weighed 15 days after preparation into loaf rubber gave 4 seers 4 chattacks and 4 seers 12½ chattacks.

It may be interesting to note the very considerable loss of weight which takes place by driage. With this object the rubber from trees Nos. 53 and 54 was weighed immediately after preparation into loaves, while still hot, and found to be 9 seers 11½ chattacks and 6 seers 13 chattacks respectively.

The weight of this rubber 15 days later has been given above as 4 seers 4 chattacks and 4 seers 12½ chattacks, showing a loss of weight by driage of 5 seers 7½ chattacks and 1 seer 0½ chattacks respectively.

It is difficult to account for the absence of all proportion in these figures. It is probable that the milk from tree No. 53, although very plentiful, was more watery than that of tree No. 54.

The weather was, on the whole, favourable to the experiment.

Tapping was commenced in the Koliajuli Hills on the 30th January 1888, and the collection was completed on the 7th February 1888.

The trees in the Sonai Hills were tapped on the 8th February and the ball rubber was collecte d on the 13th.

The total collection amounted to 1 maund 2 seers 15 chattacks, which was subsequently sold i n Calcutta as follows:—

	Mds. Srs. Ch.		Rs. As. P.
Weighing net	1 2 15	@ Rs. 71-10-9	76 15 0
Freight, brokerage, and coolie hire.....		6 9 9,	
Commission	@ Rs. 2-½ per cent. on Rs. 76-15, Rs. 1-14-3,		8 8 0
	Balance to credit.		68 7 0

Further details are attached in the usual tabular form.

No. of trees.	1886.			1887.			1888.			Remarks.
	Md.	Sr.	C.	Md.	Sr.	C.	Md.	Sr.	C.	
1	0	0	15	0	0	10	0	0	11½	
2	.....			.....			.....			
3	0	1	10	0	0	12	0	0	3	
4	0	0	13	0	0	5	0	0	1½	
5	0	0	12	0	0	9	0	0	2½	
6	0	0	8	0	0	6½	0	0	5	
7	0	1	8	0	0	8½	0	0	10	
8	0	1	0½	0	1	5½	0	0	10½	
9	0	1	8	0	0	14	0	0	9½	
10	0	1	12	0	1	0	0	0	4	
11	0	1	2½	0	0	6½	0	0	5½	
12	0	6	2	0	1	0	0	1	0½	
13	0	2	7	0	0	15	0	3	13	
14	0	2	11	0	1	4	0	0	7	
15	.....			.....			.....			
16	0	4	7	0	0	15	0	0	9	
17	0	9	0	0	1	14	0	0	12½	
18	0	10	9	0	2	8	0	1	0	
19	0	0	1	0	0	8	0	0	2½	
20	0	6	14	0	1	14	0	0	10½	
21	0	6	4	0	1	1	0	1	3½	
22	0	0	13	0	0	10½	0	1	0	
23	0	5	10	0	1	1	0	1	1	
24	0	1	3	0	0	5	0	0	7½	
25	0	1	6	0	0	6½	0	2	0½	
26	0	4	4½	0	1	5	0	1	2	
27	0	2	12	0	0	5	0	0	10½	
28	0	1	4	0	0	7½	0	0	4	
29	0	4	12	0	0	12	0	0	8½	
30	0	3	0	0	0	8	0	1	0½	
31	0	1	10	0	0	6	0	0	7	
32	0	1	8	0	0	6	0	0	2	
33	0	2	8	0	0	3	0	0	2	
34	0	3	9	0	0	9	0	0	4½	
35	.....			.....			.....			
36	0	3	1	0	1	7	0	0	5	
37	0	4	2	0	0	13	0	0	5	
38	0	3	14	0	1	9	0	1	9½	
39	0	1	2	0	0	12	0	0	11½	
40	0	9	8	0	1	6	0	0	12½	
41	0	2	3	0	0	9	0	0	7	Average yield for 3 years calculated from 44 of the original trees and 2 of the additional trees.
42	0	11	9	0	2	5	0	1	6½	
43	.....			.....			.....			
44	.....			.....			.....			
45	0	2	1	0	0	10	0	0	13	
46	0	5	9	0	4	13	0	2	7	
47	.....			.....			.....			2 mds. 3 seers 11½ chs.
48	0	2	8½	0	1	7	0	0	15½	
49	0	6	12	0	0	14½	0	0	8½	
50	0	5	4	0	0	6	0	0	14	
51	0	9	10*	.....			.....			
52	0	2	1*	.....			.....			
53	.....			.....			0	4	4	
54	.....			.....			0	4	12½	
55	.....			0	1	0½	.....			
56	.....			0	0	11	.....			
Total...	4	3	8	1	4	11½	1	2	15	

* Omitted in last year's comparative statement by mistake.

FOREST DEPARTMENT, ASSAM, DARRANG DIVISION.

Statement showing the result of an experimental tapping of 46 Rubber-trees in the Balipara Reserve for the year 1888.

Number of trees.	Measurement of trees.			Locality and nature of soil.	Kind of tree.	Rubber extracted in balls or loaves.	Condition of trees.	Date.		Yield from each tree.	Remarks.
	Height.	Girth including aërial roots.	Diameter of crown.					Tapped.	Collected.	Mds. S. Ch.	
1	99′	27′	92′	Valley of Balijuli, sandy loam with pebbles.	Shikabor..	Ball	Very good. 3 main aërial roots.....	8th February 1888.	14th February 1888.	0 0 11½	
2	.....	.....	.....	Dead, fallen since last year's return.	The tree is quite dead.	.....	.....	.....	.....	.....	
3	90′	32′	110′	Side of hill near Sonai river, sandy loam.	Shikabor .	Ball.....	Good, 4 main aërial roots	8th " ...	14th February 1888.	0 0 3	
4	110′	36′	95′	Valley of Sonai river, low sandy loam.	" ...	" ...	" 7 ditto	" ...	" ...	0 0 1½	
5	90′	47′	80′	Bank ditto ditto	" ...	" ...	" 3 ditto	" ...	" ...	0 0 2½	
6	97′	27′	94′	Valley of Joanjajuli ditto	Bogibor ..	" ...	" 3 ditto	" ...	13th February 1888.	0 0 5	
7	105′	28′	120′	Ditto ditto	" ...	" ...	" 2 ditto	" ...	" ...	0 0 10	
8	122′	159′	160′	Ditto ditto ...	" ...	" ...	Very good, 18 main aërial roots	" ...	" ...	0 0 10½	
9	100′	27′	80′	Ditto ditto ...	" ...	" ...	" 3 ditto	" ...	" ...	0 0 9½	
10	122′	85′	110′	South of Guinija Hills ditto ...	Shikabor .	" ...	Good, 6 main aërial roots	" ...	14th February 1888.	0 0 4	
11	122′	42′	70′	Valley of Balijuli ditto ...	Bogibor ..	" ...	" 2 ditto	" ...	" ...	0 0 5½	
12	91′	64′	120′	Foot of Guinija Hills ...	Shikabor .	" ...	Very good, 4 main aërial roots.....	31st January 1888.	5th February 1888.	0 1 0½	
13	118′	26′	83′	Right bank of Koliajuli near Mansiri, low rich sandy loam.	" ...	Loaf ...	" 2 ditto	2nd February 1888.	3rd February 1888.	0 3 10	
14	99′	54′	55′	Left bank of Koliajuli near Mansiri. low, rich, sandy loam.	Bogibor...	Ball ...	Good, 8 main aërial roots	30th January 1888.	4th February 1888.	0 0 3 0 0 7	Scrapings.
15	.....	.....	.....	Dead, fallen since last year's return.	The tree is quite dead.	.....	.....	.....	.....	.....	
16	120′	34′	126′	Left bank of Koliajuli, low, rich, sandy loam.	Shikabor .	Ball ...	Very good, 2 main aërial roots.....	30th January 1888.	4th February 1888.	0 0 9	
17	89′	72′	110	Left bank of Chaojuli, slightly elevated, rich, sandy loam.	" ...	" ...	" 3 ditto	" ...	" ...	0 0 12½	Label missing. Replaced 4th February 1888.
18	112′	80′	137′	Ditto low rich sandy loam..	Bogibor...	" ...	" 6 ditto	" ...	" ...	0 1 0	
19	100′	26′	83′	Ditto ditto ...	" ...	" ...	Good, 1 main aërial root	" ...	" ...	0 0 2½	
20	120′	42′	122′	Valley of Chaojuli, low, rich, sandy loam.	Shikabor .	" ...	" 2 ditto	" ...	" ...	0 0 10½	
21	98′	100′	100′	Left bank of Chaojuli ditto ...	Bogibor...	" ...	" 6 ditto	" ...	" ...	0 1 3½	
22	124	69′	100′	Right bank of Koliajuli ditto ...	" ...	Loaf* ...	" 6 ditto	" ...	31st January 1888.	0 0 14 0 0 2	Scrapings.
23	120′	85′	124′	Left ditto ditto	Shikabor .	Ball ...	" 11 ditto	2nd February 1888.	7th February 1888.	0 1 1	

24	97′	73′	65′	Left bank of Koliajuli, top of steep hill, sandy loam.	Shikabor ...	Ball	Very good, 8 main aërial roots	2nd February 1888.	6th February 1888.	0 0 7		
25	100′	111′	118′	Left bank of Koliajuli, side of steep hill, sandy loam.	" ...	Loaf	" 24 ditto	3rd February 1888.	4th February 1888.	0 1 4 0 0 12	Scrapings.	
26	100′	17′	63′	Left bank of Koliajuli, top of steep hill, sandy loam.	" ...	Ball	" 1 ditto	2nd February 1888.	6th February 1888.	0 1 2		
27	97′	29′	100′	Left bank of Koliajuli, side of steep hill, sandy loam.	" ...	Loaf	" 2 ditto	3rd February 1888.	4th February 1888.	0 0 6 0 0 4½	Ditto.	
28	81′	20′	75′	Head of ravine, sandy loam	Bogibor...	Ball	" 2 ditto	2nd February 1888.	6th February 1888.	0 0 4		
29	124′	100′	96′	West of Chaojuli, top of hill, sandy loam.	Shikabor..	"	" 8 ditto	1st February 1888.	5th February 1888.	0 0 8		
30	126′	46′	114′	West of Chaojuli, edge of stream, sandy loam.	" ...	"	" 3 ditto	" ...	" ...	0 1 0½		
31	90′	55′	68′	East of Chaojuli, top of hill, sandy loam.	Bogibor...	"	" 4 ditto	" ...	" ...	0 0 7		
32	84′	44′	67′	Koliajuli Hills, top of hill, sandy loam.	Shikabor..	"	" 4 ditto	" ...	" ...	0 0 2		
33	99′	46′	78′	Koliajuli Hills, foot of hill, sandy loam.	" ...	"	" 4 ditto	" ...	" ...	0 0 2		
34	100′	37′	68′	Ditto ditto ...	" ...	"	" 3 ditto	" ...	" ...	0 0 4½		
35	.....	.....	.....	Dead, *vide* last year's return	.....	.....	.....	.....	.....	.....		
36	99′	77′	106′	Valley of Kermerjuli, slightly elevated, sandy loam.	Shikabor..	Ball	" 7 ditto	31st January 1888	5th February 1888.	0 0 5		
37	100′	80′	84′	Ditto ditto ...	" ...	"	" 6 ditto	" ...	" ...	0 0 5		
38	98′	45′	65′	Valley of Koliajuli, sandy loam ...	" ...	Loaf* ...	Very good, 4 main aërial roots	30th January 1888.	31st January 1888.	0 1 1½ 0 0 8	Ditto.	
39	98′	34′	70′	Koliajuli Hills, top of hill, sandy loam.	Bogibor...	Ball	Good, 3 ditto	31st January 1888.	5th February 1888.	0 0 11½		
40	90′	96′	186′	Valley of Kermerjuli, sandy loam..	" ...	"	" 6 ditto	" ...	" ...	0 0 12½		
41	88′	42′	75′	Ditto ditto ...	" ...	"	" 5 ditto	" ...	" ...	0 0 7		
42	97′	89′	180′	Mouth of Chaojuli, sandy loam ...	" ...	"	Very good, 12 main aërial roots	30th January 1888.	4th February 1888.	0 1 6½		
43	.....	.....	.....	Dead *vide* last year's return	.....	... .	.....	.....	.....	.....		
44	.....	.....	.....	Ditto ditto	.....	.....	.....	.....	.....	.....		
45	100′	28′	75′	Koliajuli Hills, top of hill, sandy loam.	Shikabor..	Ball	Good, 4 main aërial roots	1st February 1888.	6th February 1888.	0 0 13		
46	100′	101′	115′	Ditto ditto ...	" ...	Loaf	" 11 ditto	" ...	2nd February 1888.	0 1 6½ 0 1 0½	Ditto.	
47	.....	.....	.....	Dead, *vide* last year's return	.....	.....	.....	.....	.....	.....		
48	95′	55′	60′	Koliajuli Hills, top of hill, sandy loam.	Bogibor...	Ball	Good, 10 main aërial roots.....	3rd February 1888.	7th February 1888.	0 0 15½		
49	129′	87′	124′	Koliajuli Hills, side of hill, sandy loam.	" ...	"	Very good, 11 main aërial roots	" ...	" ...	0 0 8½		
50	120′	39′	132′	Right bank of Koliajuli, sandy loam.	Shikabor..	"	" 2 ditto	" ...	" ...	0 0 14		
53	116′	88′	148′	East of Koliajuli Hills, sandy loam, with pebbles.	Bogibor...	Loaf	" 12 ditto	6th February 1888.	" ...	0 4 0 0 0 4	Dry. Scrapings. Srs. Cbs. 0 0½	Liquid. Mds. Srs. Cbs. 0 22 10
54	116′	68′	147′	Valley of Koliajuli Hills, low, rich, sandy loam.	Shikabor..	"	" 5 ditto	" ...	" ...	0 4 6½ 0 0 6	Scrapings.	0 16 10½
										1 2 15	0 0½	1 0 4½

* Weighed 15 days after preparation.

TEZPUR:
The 22nd February 1888

J. T. JELLICOE,
Deputy-Conservator of Forests, Darrang Division.

Appendix X.

Statement showing the number of Permits granted in 1887-88 as compared with those granted in the previous year.

Name of division.	Trade permits.		Elephant permits.		Gurkati permits.		Time permits.		Special permits.		Home permits.		Amount of fees.	
	1886-87.	1887-88.	1886-87.	1887-88.	1886-87.	1887-88.	1886-87.	1887-88.	1886-87.	1887-88.	1886-87.	1887-88.	1886-87.	1887-88.
													Rs.	Rs.
Gáro Hills	146	177	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73	88
Foreign passes	.....	.....	.....	.....	3,380	3,702	.....	.....	.....	.....	.....	.....	6,759	7,404
Gáro „	.....	.....	.....	.....	2,298	2,418	.....	.....	.....	.....	.....	.....	862	907
Goálpára „	218	403	.....	.....	.....	.....	.....	18	.....	.....	431	3,200	109	202
Kámrúp „	881	1,045	.....	.....	.....	.....	36	67	.....	.....	265	1,762	392	478
Darrang „	209	310	.....	.....	.....	.....	.....	6	.....	.....	1,287	2,313	105	169
Nowgong „	777	825	.....	.....	.....	.....	100	48	.....	10	1,065	5,463	488	465
Sibságar „	226	390	.....	.....	.....	.....	244	251	.....	.....	750	6,260	357	478
Lakhimpur „	587	651	.....	.....	.....	.....	735	800	.....	.....	254	142	1,029	1,166
Cachar „	2,842	2,297	181	147	.....	.....	.....	34	.....	.....	303	73	3,174	2 551
Sylhet „	1,809	5,284	34	21	.....	.....	102	27	.....	.....	7,121	3,539	5,505	8,858
Khási and Jaintia Hills.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38	.....	38	.....
Total	7,695	11,382	215	168	5,678	6,120	1,217	1,251	.....	10	11,514	22,752	18,891	22,766

Appendix XI.

Statement of Forest Produce granted free during 1887-88.

Description of forest produce.	Gáro Hills Division.		Goálpára Division.		Kámrúp Division.		Darrang Division.		Nowgong Division.		Sibságar Division.		Lakhimpur Division.		Cachar Division.		Sylhet Division.		Khási and Jaintia Hills Division.	
	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.
(a) To right-holders.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
I. Timber ..... } Garkati permits																				
II. Firewood ..... } Garkati permits	30	60	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	..	.....	...	.....	...
III. Minor forest produce ..... } Garkati permits																				
(b) Under concessions granted by the Local Government.																				
I. Timber	.....	...	416,910	27,794	12,476	1,674	43,280	8,656	49,755	7,957	224,440	22,444	98,280	12,952	534	33	12,760	798	.....	...
Ia. Bamboos (No.)	.....	...	260,199	3,078	81,340	813	1,465	15	114,850	1,148	198,367	3,967	7,120	71	16,400	41	629,450	1,574	.....	...
II. Firewood	.....	...	1,236,714	18,861	74,964	2,342	10,800	67	399,060	4,157	364,740	3,647	22,718	355	3,513	110	141,920	4,435	.....	...
III. Minor forest produce	.....	...	31,594	237	3,760	23	5,903	44	14,890	112	40,762	305	.....	...	285	18	314,899	2,060	.....	...
IV. Grass-grazing, and leaf fodder	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
V. Branches, leaves, and vegetable mould for manuring purposes.	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
(c) By free grants under executive orders.																				
I. Timber	.....	...	7,900	1,975	13,332	797	800	310	3,104	297	1,050	130	.....	...	.....	...	.....	...	.....	...
Ia. Bamboos (No.)	.....	...	200	4	42,570	426	.....	...	8,000	80	.....	...	.....	...	.....	...	.....	...	.....	...
II. Firewood	.....	...	174,438	2,725	14,587	448	.....	...	69,000	719	.....	...	.....	...	.....	...	.....	...	.....	...
III. Minor forest produce	.....	...	126,219	363	30,360	87	.....	...	102,010	306	.....	...	.....	...	.....	...	.....	...	.....	...
IV. Grass-grazing and leaf fodder	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
V. Branches, leaves, and vegetable mould for manuring purposes.....	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...
Total	30	60	.....	55,037	.....	6,610	.....	9,092	.....	14,776	.....	30,493	.....	13,378	.....	202	[illegible]	8,867	.....	...

Appendix XII.

Statement showing increase and decrease in Forest Produce removed by purchasers in 1887-88, as compared with that removed in the previous year.

No.	Description of forest produce.	Gáro Hills Division.				Goálpára Division.				Kámrúp Division.				Darrang Division.				Nowgong Division.				Sibságar Division.				No.
		1886-87.	1887-88.	In-crease.	De-crease.	1886-87.	1887-88.	In-crease.	De-crease.	1886-87.	1887-88.	In-crease.	De-crease.	1886-87.	1887-88.	In-crease.	De-crease.	1886-87.	1887-88.	In-crease.	De-crease.	1886-87.	1887-88.	In-crease.	De-crease.	
	Reserved Forests.																									
1	Sál trees ..... c. ft.	870	4,710	3,840	....	61,440	135,210	73,770	....	82,138	108,064	25,926	....	375	....	....	375	780	1,900	1,120	....	....	....	....	....	1
2	First-class trees ..... do.	....	....	....	....	13,110	12,630	....	1,080	2,269	5,980	2,711	....	550	2,275	1,725	....	540	1,220	680	....	4,128	2,370	....	1,758	2
3	Second ditto ..... do.	....	....	....	....	1,320	6,510	5,190	....	1,690	1,742	52	....	6,875	14,600	7,725	....	780	1,075	295	....	9,420	5,370	....	4,050	3
	Total	870	4,710	3,840	....	76,470	154,350	78,960	1,080	87,117	115,806	28,689	....	7,800	16,875	9,450	375	2,100	4,225	2,125	....	13,548	7,740	....	5,808	
1	First-class timber ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
2	Second ditto ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
3	Third ditto ..... do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3
4	Converted ditto ..... do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4
	Total	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
1	Poles or saplings ..... c. ft.	....	....	....	....	....	....	....	....	348	365	17	....	450	288	....	162	176	160	....	16	917	894	....	4,023	1
2	Boats or dugouts ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	600	600	....	....	....	....	....	2
3	Dead wood ..... do.	....	....	....	....	119,420	42,660	....	76,760	23,506	15,472	....	8,034	500	1,030	530	....	240	520	280	....	2,040	810	....	1,230	3
4	Miscellaneous pieces ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	189	....	....	189	4
5	Trade permits ..... No.	6	8	2	....	199	348	149	....	653	841	188	....	62	134	72	....	31	88	57	....	....	....	....	....	5
6	Fire-wood ..... c. ft.	....	....	....	....	....	....	....	....	186	32	....	154	....	....	....	....	....	5,700	5,700	....	6,800	4,800	....	2,000	6
7	Ditto permits (annual) ..... No.	....	....	....	....	....	18	18	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	7
8	Ditto (monthly) ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	19	18	....	....	....	....	....	8
9	Charcoal ..... c. ft	....	....	....	....	468	1,520	1,052	....	1,167	216	....	951	....	....	....	....	....	522	522	....	5,040	1,476	....	3,564	9
10	Bamboos ..... No.	162	150	....	12	....	....	....	....	....	400	400	....	400	....	....	400	....	1,000	1,000	....	2,500	300	....	2,200	10
11	Canes (bundles) ..... do.	....	....	....	....	2,590	400	....	2,190	....	....	....	....	19,550	16,300	....	3,250	....	14,976	14,976	....	5,100	4,100	....	1,000	11
12	Agar (baskets) ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	12
13	Grass and reeds (bundles) ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	330	330	....	1,000	2,500	1,500	....	13
14	Silkworm trees ..... do.	....	....	....	....	....	....	....	....	263	163	....	100	....	....	....	....	....	....	....	....	....	....	....	....	14
15	Betel-creeper ..... do.	....	....	....	....	....	....	....	....	6	....	....	6	....	....	....	....	....	....	....	....	....	....	....	....	15
16	Lac trees ..... do.	....	....	....	....	....	....	....	....	8	1	....	7	....	....	....	....	....	....	....	....	....	....	....	....	16
17	Garkati passes (Gáro) ..... do.	20	....	....	20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	17
18	Home permits ..... do.	....	....	....	....	....	....	....	....	....	985	985	....	....	....	....	....	....	....	....	....	....	....	....	....	18
19	Elephant tusks ..... seers.	....	....	....	....	....	....	....	....	....	6	6	....	....	....	....	....	....	....	....	....	....	....	....	....	19
20	Ditto permits ..... No.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	20
	Protected Forests and unclassed State Forests and waste lands.																									
1	Sál trees ..... c. ft.	5,880	18,540	12,660	....	480	5,610	5,130	....	35,372	50,080	14,708	....	....	....	....	....	....	....	....	....	676	....	....	676	1
2	First-class trees ..... do.	6,900	12,750	5,850	....	1,650	750	....	900	2,229	3,904	1,675	....	7,275	8,450	1,175	....	8,842	4,200	....	4,642	8,943	21,810	12,867	....	2
3	Second ditto ..... do.	8,370	18,450	10,080	....	2,520	1,050	....	1,470	4,374	5,087	713	....	7,525	8,400	875	....	12,799	4,175	....	8,624	9,270	14,070	4,800	....	3
	Total	21,150	49,740	28,590	....	4,650	7,410	5,130	2,370	41,975	59,071	17,096	....	14,800	16,850	2,050	....	21,641	8,375	....	13,266	18,889	35,880	17,667	676	
1	First-class timber ..... c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
2	Second-class ditto ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
3	Third-class ditto ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3
4	Converted ditto ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4
	Total	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
1	Poles or saplings ..... c. ft.	....	....	....	....	....	....	....	....	....	....	....	....	330	78	....	252	200	....	....	200	2,451	5,565	3,114	....	1
2	Boat or dugouts ..... do.	64,590	67,080	2,490	....	....	....	....	....	....	....	....	....	....	....	....	....	1,664	29,730	28,066	....	4,720	1,320	....	3,400	2
3	Dead wood ..... do.	18,400	18,450	50	....	1,680	820	....	860	110	676	566	....	225	675	450	....	12,405	3,144	....	9,261	1,170	5,600	4,430	....	3
4	Miscellaneous pieces ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4
5	Trade permits ..... No.	140	169	29	....	19	55	36	....	228	204	....	24	147	176	29	....	746	737	....	9	226	390	164	226	5
6	Garkati passes (foreign) ..... do.	3,380	3,702	322	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6
7	Ditto ditto (Gáro) ..... do.	2,278	2,418	140	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7
8	Fire-wood ..... c. ft	....	....	....	....	....	440	440	....	....	2,584	2,584	....	....	....	....	....	....	8,700	8,700	....	22,100	25,200	3,100	....	8
9	Ditto permits (annual) ..... No.	....	....	....	....	25	....	....	25	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9
10	Ditto ditto (monthly) ..... do.	....	....	....	....	....	....	....	....	36	67	31	....	....	5	5	....	99	29	....	70	244	251	7	....	10
11	Charcoal ..... c. ft.	....	....	....	....	....	....	....	....	612	1,278	666	....	180	1,640	1,460	....	4,050	12,464	8,414	....	10,656	11,644	988	....	11
12	Bamboos ..... No.	....	....	....	....	....	....	....	....	....	....	....	....	539	....	....	539	4,482	14,214	9,732	....	1,425	2,350	925	43,750	12
13	Canes (bundles) ..... do.	....	....	....	....	8,250	385	....	7,865	9,220	200	....	9,020	1,108	100	....	1,008	43,260	31,604	....	11,656	53,700	11,950	....	....	13
14	Grass (ditto) ..... do.	....	....	....	....	....	....	....	....	....	9,000	9,000	....	....	....	....	....	....	800	800	....	....	23,100	23,100	....	14
15	Ditto and reeds (bundles) ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	15
16	Reeds (bundles) ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	220	220	....	....	....	....	....	16
17	Agar (baskets ..... do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	17
18	Leaves (dals ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	18
19	Home permits ..... do.	....	....	....	....	431	3,200	2,769	....	285	777	512	....	1,287	2,313	1,026	....	....	5,463	5,463	....	750	6,260	5,510	....	19
20	Silkworm trees ..... do.	....	....	....	....	....	....	....	....	46	106	60	....	....	....	....	....	....	....	....	....	....	....	....	....	20
21	Betel creepers ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	21
22	Elephant tusks ..... Seer.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	22
23	Lac trees ..... No	....	....	....	....	....	....	....	....	....	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	23
24	Special permits ..... do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10	10	....	....	....	....	....	24

APPENDIX XII.—(*Concluded.*)

No.	Description of forest produce.	Lakhimpur Division.				Cachar Division.				Sylhet Division.				Khási and Jaintia Hills Division.				Free grants in the whole province.				No.
		1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	
	Reserved Forests.																					
1	Sál-trees ..... c. ft.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	360	360	.....	1
2	First-class trees ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	830	830	.....	2
3	Second ditto ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	1,040	810	.....	230	3
	Total	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	1,040	1,940	1,160	230	
1	First class timber ..... c. ft.	....	....	....	....	23,002	18,758	.....	4,251	10,505	6,910	.....	3,595	.....	.....	.....	....	.....	.....	.....	.....	1
2	Second ditto ..... do.	....	....	....	....	18,242	21,455	3,213	.....	1,892	1,914	22	.....	.....	.....	.....	....	.....	.....	.....	.....	2
3	Third ditto ..... do.	....	....	....	....	262,047	211,981	.....	50,066	17,224	10,485	.....	6,739	.....	.....	.....	....	.....	.....	.....	.....	3
4	Converted timber ..... do.	....	....	....	....	85	799	714	.....	470	474	4	.....	.....	.....	.....	....	.....	.....	.....	.....	4
	Total	....	....	....	....	303,383	252,993	3,927	54,317	30,091	19,388	26	10,334	.....	.....	.....	....	.....	.....	.....	.....	
1	Poles or saplings ..... c. ft.	....	....	....	....	1,132	680	.....	452	.....	1,580	1,580	.....	.....	.....	.....	....	988	1,064	76	.....	1
2	Boats or dugouts ..... do.	....	....	....	....	600	60	.....	540	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	2
3	Dead wood ..... do.	....	....	....	....	3,626	.....	.....	3,626	.....	.....	.....	.....	.....	.....	.....	....	19,502	22,962	3,460	.....	3
4	Miscellaneous pieces ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	4
5	Trade permits ..... No.	....	....	....	....	.....	1,803	1,803	.....	1,202	626	.....	576	.....	.....	.....	....	.....	.....	.....	.....	5
6	Firewood ..... c. ft.	....	....	....	....	12,396	8,768	.....	3,628	526	816	90	.....	.....	.....	.....	....	65,646	256,526	190,880	.....	6
7	Ditto permits (annual) ..... No.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	7
8	Ditto ditto (monthly) ..... do.	....	....	....	....	.....	20	20	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	8
9	Charcoal ..... c. ft.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	315	1,499	1,184	.....	9
10	Bamboos ..... No.	....	....	....	....	563,922	539,225	.....	24,697	291,500	255,025	.....	36,475	.....	.....	.....	....	81,550	50,770	.....	30,780	10
11	Canes (bundles) ..... do.	....	....	....	....	21,253	15,373	.....	5,880	4,572	2,380	.....	2,192	.....	.....	.....	....	273	10,427	10,154	.....	11
12	Agar (baskets) ..... do.	....	....	....	....	.....	4	4	.....	175	556	381	.....	.....	.....	.....	....	.....	.....	.....	.....	12
13	Grass and reeds (bundles) ..... do.	....	....	....	....	.....	4,000	4,000	.....	184,009	146,855	.....	37,154	.....	.....	.....	....	10,010	248,162	238,152	.....	13
14	Silkworm-trees ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	14
15	Betel creepers ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	15
16	Lac-trees ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	16
17	Gurkati passes (Gáro) ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	17
18	Home permits ..... do.	....	....	....	....	.....	.....	.....	.....	1,886	1,086	.....	799	.....	.....	.....	....	.....	.....	.....	.....	18
19	Elephant tusks ..... sr.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	19
20	Ditto permits ..... No.	....	....	....	....	181	147	.....	34	16	21	5	.....	.....	.....	.....	....	.....	.....	.....	.....	20
	Protected Forests and unclosed State Forests and Waste Lands.																					
1	Sál tress ..... c. ft.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	330	.....	.....	330	1
2	First class trees ..... do.	21,649	13,890	....	7,759	.....	.....	.....	.....	.....	.....	.....	.....	120	30	.....	90	107,519	48,120	.....	59,390	2
3	Second class ,, ... do.	53,520	143,780	90,260	....	.....	.....	.....	.....	.....	.....	.....	.....	44,265	30	.....	44,230	203,575	791,755	588,180	.....	3
	Total	75,169	157,670	90,260	7,759	.....	.....	.....	.....	.....	.....	.....	.....	44,385	60	.....	44,320	311,4 5	839,875	588,180	59,720	
1	First class timber ..... c. ft.	....	....	....	....	9,419	11,798	2,379	.....	2,555	1,966	.....	589	.....	.....	.....	....	.....	.....	.....	.....	1
2	Second ditto ..... do.	....	....	....	....	10,303	7,144	.....	3,159	1,866	2,149	343	.....	.....	.....	.....	....	.....	.....	.....	.....	2
3	Third ditto ..... do.	....	....	....	....	47,065	25,857	.....	21,208	21,879	23,217	1,338	.....	.....	.....	.....	....	64	534	470	.....	3
4	Converted ditto ..... do.	....	....	....	....	1,506	800	.....	706	460	521	61	.....	.....	.....	.....	....	4,515	12,760	8,245	.....	4
	Total	....	....	....	....	68,293	45,599	2,379	25,073	26,700	27,522	1,742	589	.....	.....	.....	....	4,579	13,294	8,715	.....	
1	Poles or saplings ..... c. ft.	20	560	540	....	7,348	436	.....	6,912	.....	.....	.....	.....	1,177	520	.....	657	11,407	.....	.....	11,407	1
2	Boats or dugouts ..... do.	3,375	2,910	....	465	17,100	5,520	.....	11,580	45	.....	.....	45	.....	.....	.....	....	.....	.....	.....	.....	2
3	Deadwood ..... do.	....	....	....	....	3,562	1,101	.....	2,461	.....	.....	.....	.....	.....	700	700	....	28,392	5,486	.....	22,906	3
4	Miscellaneous pieces ..... do.	....	4,350	4,350	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	4
5	Trade permits ..... No.	587	651	64	....	2,842	494	.....	2,348	1,809	4,658	2,849	.....	38	.....	.....	38	.....	.....	.....	.....	5
6	Gurkati passes (foreign) ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	50	.....	.....	50	6
7	Ditto do. (Gáro) ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	7
8	Firewood ..... c. ft.	....	....	....	....	14,058	3,307	.....	10,751	24,176	4,397	.....	19,779	.....	138	138	....	225,834	2,248,611	2,017,777	.....	8
9	Ditto permits (annual) ..... No.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	9
10	Ditto do. (monthly) ..... do.	735	800	65	....	.....	14	14	.....	102	27	.....	75	.....	.....	.....	....	.....	.....	.....	.....	10
11	Charcoal ..... c. ft.	2,745	3,795	1,050	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	10,818	10,818	.....	11
12	Bamboos ..... No.	21,146	8,722	....	12,424	218,787	96,575	.....	122,212	112,785	460,675	347,890	.....	.....	.....	.....	....	663,113	1,209,191	646,078	.....	12
13	Canes (bundles) ..... do.	342,000	250,495	....	91,505	3,180	1,978	.....	1,202	2,242	3,732	1,490	.....	.....	.....	.....	....	34,957	107,118	72,161	.....	13
14	Grass (ditto) ..... do.	....	....	....	....	5,425	16,000	10,575	.....	.....	.....	.....	.....	1,032	466	.....	566	64,400	.....	.....	.....	14
15	Ditto and reeds (bundles) ..... do.	....	....	....	....	140	.....	.....	140	122,526	111,999	.....	10,527	.....	.....	.....	....	140	302,205	302,065	64,400	15
16	Reeds (bundles) ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	144	144	....	24,250	.....	.....	24,250	16
17	Agar (baskets) ..... do.	....	....	....	....	119	205	86	.....	55	556	501	.....	.....	.....	.....	....	.....	.....	.....	.....	17
18	Leaves (dais) ..... do.	....	....	....	....	.....	.....	.....	.....	.....	21,575	21,575	.....	.....	.....	.....	....	11,780	2,770	.....	9,010	18
19	Home permits ..... do.	254	142	....	112	303	73	.....	230	5,236	2,453	.....	2,783	.....	.....	.....	....	.....	.....	.....	.....	19
20	Silkworm-trees ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	20
21	Betel-creepers ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	21
22	Elephant tusks ..... srs.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	22
23	Lac trees ..... No.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	23
24	Special permits ..... do.	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	24

Appen

Statement showing Increase and Decrease in Forest Revenue collected in 1887-88,

No.	Description of forest produce.	1 Direction.				2 Working Plans Division.				3 Gáro Hills Division.				4 Goálpára Division.				5 Kámrúp Division.			
		1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.
							Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
I.	Timber and other produce removed from the forest by Government agency	..	..	..	..	..	..	..	..	32	1,389	1,357	..	..	..	..	..	14	74	60	..
II.	Timber and other produce removed from the forest by consumers or purchasers.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	RESERVED FORESTS.																				
1	Sál-trees	..	..	..	..	..	..	..	..	145	270	125	..	8,087	26,723	18,636	..	9,907	12,633	2,726	..
2	First-class trees	..	..	..	..	..	..	..	..	..	..	....	..	1,806	2,856	1,050	..	350	395	45	..
3	Second-class trees	..	..	..	..	..	..	..	..	..	..	....	..	77	289	212	..	55	71	16	..
	Total	..	..	..	..	..	..	..	..	145	270	125	..	9,970	29,868	19,898	..	10,312	13,099	2,787	..
1	First-class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	Second-class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	Third-class. "	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1	Converted timber (pieces)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	Poles or saplings	..	..	..	..	..	..	..	..	..	..	..	..	5	7	2	..	3	4	1	..
3	Boats or dugouts	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	Lead wood	..	..	..	..	..	..	..	..	..	..	..	..	6,637	2,747	..	3,890	4,139	2,751	..	1,388
5	Firewood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	1
6	" license (monthly)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	" " (annual)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	Charcoal	..	..	..	..	..	..	..	..	..	..	..	..	6	24	18	..	3	3	..	..
9	Bamboos	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	4	4	..
10	Canes	..	..	..	..	..	..	..	..	..	..	..	..	19	3	..	16	..	..	..	..
11	Grass	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	Trade permit fees	..	..	..	..	..	..	..	..	2	4	1	..	..	..	..	..	..	..	..	..
13	Home permits	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	Pass-fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	Miscellaneous minor produce	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23	84	61	..
16	Rubber-mahals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	Agar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	Grass and reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	Permit and pass-fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	Gurkati passes (Gáro)	..	..	..	..	..	..	..	..	7	..	..	7	..	..	..	..	..	..	..	..
21	Timber on land allotted for cultivation.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	Elephant permits	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total Reserved Forests	..	..	..	..	..	..	..	..	157	276	126	7	16,637	32,649	19,918	3,906	14,482	15,946	2,853	1,389
	PROTECTED FORESTS AND UNCLASSED STATE FORESTS AND WASTE LANDS.																				
1	Sál-trees	..	..	..	..	..	..	..	..	1,245	3,150	1,905	..	85	910	825	..	5,328	8,016	2,688	..
2	First-class trees	..	..	..	..	..	..	..	..	2,040	1,673	..	367	114	304	190	..	248	433	185	..
3	Second-class trees	..	..	..	..	..	..	..	..	541	779	238	..	164	67	..	97	154	230	76	..
4	Miscellaneous trees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	..	..	..	..	..	..	..	3,826	5,602	2,143	367	363	1,281	1,015	97	5,730	8,679	2,949	..
1	First-class timber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	Second ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	Third ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1	Converted timber (pieces)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	Poles and saplings	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	..	..	..	..
3	Boats or dugouts	..	..	..	..	..	..	..	..	..	..	..	..	16	26	10	..	..	..	..	..
4	Ditto *ad valorem* duty of 10 per cent.	..	..	..	..	..	..	..	..	1,000	1,059	59	..	..	..	..	..	..	..	..	..
5	Timber on land allotted for cultivation.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	Dead wood	..	..	..	..	..	..	..	..	1,702	2,323	621	..	62	106	44	..	128	58	..	70
7	Fire-wood	..	..	..	..	..	..	..	..	..	..	..	..	5	9	4	..	..	11	11	..
8	Ditto licenses (monthly)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	36	70	34	..
9	Ditto ditto (annual)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	Charcoal	..	..	..	..	..	..	..	..	..	..	..	..	4	7	3	..	23	18	..	5
11	Bamboos	..	..	..	..	..	..	..	..	..	..	..	..	..	64	64	..	..	..	..	..
12	Canes	..	..	..	..	..	..	..	..	..	..	..	..	215	134	..	81	69	2	..	67
13	Reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	1,357	1,357	..	..	..	..	..
14	Grass	..	..	..	..	..	..	..	..	..	..	..	..	..	2,478	2,478	..	..	24	24	..
15	Grazing dues	..	..	..	..	..	..	..	..	320	268	..	52	..	..	..	..	..	..	..	..
16	Gurkati licenses	..	..	..	..	..	..	..	..	7,635	8,310	675	..	..	..	..	..	..	..	..	..
17	India-rubber	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	Rubber mahals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	300	300	..
19	Trade permit-fees	..	..	..	..	..	..	..	..	70	86	16	..	..	..	..	..	..	..	..	..
20	Pass-fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	Permit and pass-fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	Lac-mahals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	Miscellaneous minor produce	..	..	..	..	..	..	..	..	..	..	..	..	9	15	6	..	12	19	7	..
24	Agar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	Grass-mahál	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	Grass and reeds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	Cane-mahál	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	Home-consumption permits	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	Bankar mahals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	Leases for cherras	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	Special permit-fees	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
32	Posts	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
33	Soom land	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
34	Cassia mahál	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total Protected Forest and Unclassed State Forests and Waste Lands.	..	..	..	..	..	..	..	..	14,353	17,648	3,514	419	674	5,481	4,935	178	5,938	9,181	3,325	142
	Add outstandings realised during the year.	..	..	..	..	..	..	..	..	..	1,969	1,969	..	..	..	..	..	6,655	15,973	9,318	..
	Total revenue under II.	..	..	..	..	..	..	..	..	14,710	19,884	5,600	426	17,311	38,130	24,903	4,084	27,155	41,100	13,490	1,534
III.—Drift and waif wood and confiscated forest produce.		..	..	..	..	..	..	..	..	867	86	..	781	29	20	..	9	590	277	..	363
IV.—Revenue on forests not managed by Government.		..	..	..	..	..	..	..	..	712	1,318	606	..	123	752	629	..	7,375	3,220	..	4,155
V.—Miscellaneous		33	3	..	30	..	1,212	1,212	..	435	975	540	..	996	950	..	46	1,847	1,731	..	116
	Grand Total	33	3	..	30	..	1,212	1,212	..	16,786	23,661	8,106	1,207	18,449	25,542	25,542	4,139	36,961	46,358	15,539	6,168

dix XIII.

as compared with that collected in the previous year.

	6				7				8				9				10				11				12				
	Darrang Division.				Nowgong Division.				Sibságar Division.				Lakhimpur division.				Cachar division.				Sylhet division.				Khási and Jaintia Hills Division.				N
	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	
	341	105	..	236	..	..	..	..	..	405	405	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	I.
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	II.
	150	..	..	150	260	640	380	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	132	546	414	..	108	276	168	..	703	474	..	235	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	550	1,168	618	..	64	116	52	..	716	358	..	358	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
	832	1,714	1,032	150	432	1,032	600	..	1,423	832	..	593	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,569	2,853	..	2,656	2,626	1,728	..	898	..	..	..	..	1
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3,398	3,448	50	..	355	339	4	..	..	..	..	..	2
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15,175	10,808	..	4,367	1,077	655	..	422	..	..	..	..	3
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24,082	17,109	50	7,023	4,058	2,742	4	1,320	..	..	..	..	
	..	..	..	..	..	..	..	..	511	..	..	511	..	..	..	..	20	68	48	..	62	23	..	39	..	..	..	..	1
	4	5	1	..	7	7	..	..	103	18	..	85	..	..	..	..	28	24	..	4	..	49	49	..	..	..	..	..	2
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60	6	..	54	..	..	..	..	..	..	..	..	3
	55	199	144	..	88	147	59	..	51	60	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	48	23	..	25	8	51	43	..	..	..	..	..	5
	..	9	9	..	1	19	18	..	59	43	..	16	..	..	..	..	..	20	20	..	..	..	..	..	..	..	..	..	6
	..	..	..	..	..	..	..	..	9	..	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
	..	..	..	..	..	10	10	..	35	5	..	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
	10	..	..	10	..	10	10	..	25	5	..	20	..	..	..	..	1,331	1,280	..	51	729	638	..	91	..	..	..	..	9
	147	122	..	25	..	115	115	..	38	31	..	7	..	..	..	..	1,325	950	..	375	286	149	..	137	..	..	..	..	10
	..	..	..	..	..	5	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
	31	67	36	..	16	44	28	..	33	44	11	..	..	..	..	..	..	..	..	..	1,218	626	..	592	..	..	..	..	12
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	942	1,086	144	..	..	..	..	..	13
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	62	288	226	..	..	..	..	..	14
	..	..	..	..	3	..	..	3	84	62	..	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	250	250	..	..	..	..	..	..	16
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	6	..	263	180	..	83	..	..	..	..	17
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	446	287	..	159	..	..	..	..	18
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
	..	..	..	..	..	9	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	8	..	..	..	..	..	22
	1,079	2,116	1,322	185	547	1,398	854	3	2,373	1,100	20	1,293	..	..	..	..	26,894	19,488	126	7,532	8,324	6,377	474	2,421	..	..	..	..	
	..	..	..	..	..	..	..	..	423	..	..	423	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	1,746	2,028	282	..	1,762	3,528	1,766	..	1,572	4,008	2,436	..	4,115	2,763	..	1,352	..	..	..	..	..	..	..	..	24	6	..	18	2
	602	676	74	..	1,027	1,420	393	..	687	953	266	..	3,576	9,028	5,452	..	..	..	..	..	..	..	..	..	3,029	2	..	3,027	3
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
	2,348	2,704	356	..	2,789	4,948	2,159	..	2,682	4,961	2,702	423	7,691	11,791	5,452	1,352	..	..	..	..	..	..	..	..	3,053	8	..	3,045	
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,127	1,870	..	257	639	491	..	148	..	..	..	..	1
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,314	938	..	376	339	403	64	..	..	..	..	..	2
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,688	1,330	..	1,358	1,367	1,451	84	..	..	..	..	..	3
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6,729	4,158	..	2,571	2,345	2,345	148	148	..	..	..	..	
	..	..	..	..	..	..	..	..	527	..	..	527	279	1,184	905	..	78	37	..	41	206	17	..	189	..	..	..	..	1
	3	5	2	..	6	..	..	6	51	116	65	..	..	4	4	..	30	11	..	19	..	20	20	..	..	3	3	..	2
	..	..	..	..	180	..	..	180	321	124	..	197	338	292	..	46	1,058	104	..	954	152	16	..	136	..	..	..	..	3
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
	2,837	2,089	..	748	..	..	..	..	548	2,274	1,726	..	1,459	1,184	..	275	917	1,860	943	..	834	12,567	11,733	..	..	..	..	..	5
	19	54	35	..	494	348	..	146	52	12	..	40	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	6
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	54	22	..	32	378	275	..	103	..	2	2	..	7
	..	5	5	..	99	29	..	70	221	204	..	17	735	840	105	..	..	14	14	..	102	40	..	62	..	..	..	..	8
	..	..	..	..	..	..	..	..	..	36	36	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
	1	21	20	..	70	87	17	..	148	40	..	108	38	53	15	..	..	..	..	..	..	..	..	..	..	..	..	..	10
	11	11	..	..	91	156	65	..	26	28	2	..	444	167	..	277	335	187	..	148	282	1,152	870	..	..	..	..	..	11
	8	1	..	7	323	237	..	86	418	495	77	..	2,340	1,886	..	454	156	121	..	35	140	233	93	..	..	..	..	..	12
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	18	..	13
	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	31	..	14
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
	..	..	..	..	..	..	..	..	..	..	..	..	17	..	..	17	..	..	..	..	..	..	..	..	..	..	..	..	17
	22,315	21,605	..	710	88	34	..	54	..	..	..	..	11,550	10,600	..	1,050	500	275	..	225	..	..	..	..	350	500	150	..	18
	74	88	14	..	373	365	..	8	166	151	..	15	294	326	32	..	..	..	..	..	625	4,658	4,033	..	..	..	..	..	19
	..	98	98	..	82	168	136	..	..	..	..	..	..	..	..	..	..	..	..	..	635	415	..	220	..	..	..	..	20
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21
	..	..	..	..	199	..	..	199	..	88	88	..	12	..	..	12	..	..	..	..	..	..	..	..	..	..	..	..	22
	..	25	25	..	64	..	..	64	..	55	55	..	..	100	100	..	..	..	..	..	..	..	..	..	49	95	46	..	23
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	179	307	128	..	402	..	..	402	..	..	..	..	24
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	45	56	11	..	1,085	1,475	440	..	..	..	..	..	25
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	4	..	10	302	389	87	..	97	..	..	97	26
	..	..	..	..	..	..	..	..	..	..	..	..	1,000	..	..	1,000	..	..	..	..	..	..	..	..	..	..	..	..	27
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,618	2,440	..	178	..	..	..	..	28
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	488	157	..	331	..	..	..	..	29
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	915	35	..	880	..	..	..	..	30
	..	..	..	..	..	5	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31
	..	..	..	..	..	..	..	..	..	677	677	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32
	..	..	..	..	..	..	..	..	..	..	..	..	..	32	32	..	..	..	..	..	..	..	..	..	..	..	..	..	33
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	123	123	..	34
	27,616	26,706	555	1,465	4,808	6,381	2,386	813	5,165	9,261	5,428	1,327	26,297	28,459	6,645	4,483	16,095	7,156	1,996	4,035	11,459	26,224	17,424	2,649	3,549	784	377	3,142	
	..	..	..	..	189	188	..	2	85	74	..	15	600	..	..	600	1,556	1,911	355	..	..	..	..	..	..	..	..	..	
	28,805	28,829	1,777	1,630	5,485	7,907	3,240	818	7,622	19,435	5,448	2,635	26,897	28,459	6,645	5,082	38,945	28,555	1,577	11,567	19,783	32,511	17,898	5,070	3,549	784	377	3,142	
	50	51	1	..	23	278	255	..	337	409	72	..	..	..	..	..	317	314	..	3	..	412	412	..	1	..	..	1	
	..	9	9	..	..	..	..	..	..	..	..	..	..	..	..	..	1,401	7,168	5,764	..	..	3,077	3,077	..	1,024	870	..	154	
	164	517	353	..	..	439	439	..	829	437	..	392	366	790	424	..	4,163	3,371	..	792	29	17	..	12	189	2	..	187	
	29,250	29,504	2,140	1,886	5,508	8,515	3,928	818	8,788	11,686	5,925	3,027	27,263	29,249	7,069	5,082	44,429	39,408	7,341	12,362	19,812	36,117	21,387	5,082	4,763	1,656	377	3,142	

Appendix XIV.

Forest Produce exported from and remaining in the District of Cachar at the close of 1887-88.

SILCHAR AND SIYALTEK.

Description of forest produce.	Quantity of forest produce which passed the Silchar Revenue Station.			Quantity of forest produce which had passed the Silchar Revenue Station and was again checked at Siyaltek Revenue Station.			Amount of forest produce which remained in the district at the close of the year.		
	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.	From Government and foreign forests.	From private forests.	Total.
Logs	7,956	3,229	11,185	2,253	2,056	4,309	5,703	1,173	6,876
Agar	89	.....	89	81	.....	81	8	.....	8
Posts and planks	285	208	493	110	41	151	175	167	342
Poles	226	.....	226	16	.....	16	210	.....	210
Bamboos	688,625	30,250	718,875	431,560	3,800	435,360	257,065	26,450	283,515
Canes (bundles)	12,542	1,296	13,839	10,623	738	11,361	1,919	559	2,478
Sun-grass and reeds (cubic ft.)	4,000	1,031,475	1,035,475	.....	933,000	933,000	.....	98,475	98,475
Firewood (maunds)	2,923	11,984	14,907	.....	97	97	.....	11,887	11,887
Dugouts	20	4	24	1	.....	1	19	4	23

MATIJURI AND SIYALTEK.

Logs	793	3,247	4,040	252	2,688	2,940	541	559	1,100
Agar	58	.....	58	30	.....	30	28	.....	28
Posts and planks	35	628	663	.....	522	522	.....	106	106
Poles	28	.....	28	12	.....	12	16	.....	16
Bamboos	103,900	159,895	163,795	85,100	113,600	198,700	18,800	46,295	48,095
Canes (bundles)	5,024	5,696	10,720	4,330	4,782	9,112	694	914	1,608
Sun-grass and reeds	1,500	25,180	26,680	.....	3,120	3,120	.....	22,060	22,060
Firewood (maunds)	.....	2,373	2,373	.....	312	312	.....	2,061	2,061

Appendix XIV.—(*Continued.*)

Statement showing the Forest Produce removed from Government, Foreign, and Private Forests in Cachar Division in the year 1887-88.

Revenue stations.	Locality.	Logs.			Agar.		Posts and planks.			Poles.		Dugouts.		Bamboos.		Canes.		Sun-grass and reeds.		Charcoal.		Firewood.		Fees.
		Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Cubic feet.	Amount.	Number.	Amount.	Number.	Amount.	Amount.
				Rs. A.		Rs. A.			Rs. A. P.		Rs. A.		Rs. A.		Rs. A.		Rs. A. P.		Rs. A.				Rs. A. P.	Rs. A.
Silchar	Government — Reserves	5,144	193,519	16,654 12	4	6 0	225	867	67 11 9	166	20 12	1	6 0	47,225	1,168 1	10,229	639 5 6	4,000	2 8	..	..	2,020	45 10 0	199 8
	Government — Unclassed State Forests	345	12,12[illegible]	1,468 3	85	127 8	..	..	..	16	2 0	18	104 0	13,850	36 14	1,334	83 6 0	....	.....	..	..	9[illegible]	15 10 0	18 8
	Total	5,489	206,644	18,1[illegible]2 15	89	133 8	225	867	67 11 9	182	22 12	19	110 0	481,075	1,204 15	11,563	722 11 6	4,000	2 8	..	..	2,923	61 4 6	218 0
	Foreign Forests	2,467	78,429	6,397 15	.	.....	57	193	18 4 9	44	7 0	1	6 0	207,550	521 6	957	61 3 0	...	.....	..	..	..	.....	62 8
	Private "	3,279	73,366	....	..	.....	208	454	.	..	.....	4	....	30,250	.....	1,297	.....	1,021,475	.....	1,190	..	11,984	....	.....
	Total Silchar	11,185	357,439	24,520 14	89	133 8	493	1,514	86 0 6	226	29 12	24	116 0	718,875	1,726 5	13,839	786 14 6	1,035,475	2 8	1,190	..	14,907	61 4 6	280 8
Matijuri	Government — Reserves	756	30,456	2,013 15	..	.. ..	.	..	..	23	2 14	..	....	57,400	143 8	5,024	314 0 0	....	.....	..	..	..	.....	43 0
	Government — Unclassed State Forests	37	1,225	85 1	58	87 12	35	59	18 7 0	5	0 10	..	.. .	9,400	23 8	.. .	.....	1,800	3 12	..	..		.....	0
	Total	793	31,681	2,099 0	58	87 12	35	59	18 7 0	28	3 8	..	....	66,800	167 0	5,024	314 0 0	1,800	3 12	..	..	..	.....	50 0
	Foreign Forests	...	. ..	....	..	.....	..	..	...	..	.....	..	....	37 100	92 12	. ..	... ..	....	.....	..	..	..	.....	1 0
	Private "	3,247	97,797	....	..	.....	628	1,544	....	..	.....	..	....	159,895	... ..	5,696	... ..	25,180	.....	..	..	2,873	.....	.....
	Total Matijuri	4,040	129,478	2,099 0	58	87 12	663	1,603	18 7 0	28	3 8	..	....	263,795	259 12	10,720	314 0 0	26,980	3 12	..	..	2,873	....	51 0
Syaltek	Government — Reserves	...	.....	....	..	.....	..	..	. . ..	..	. . ..	..	. .	....	.....	.	.....	..	.....	..	..	..	.....	. .
	Government — Unclassed State Forests	698	23,853	2,627 8	62	92 4	115	189	18 11 6	69	8 10	..	12 8	46,800	127 0	688	43 0 6	12,625	31 9	..	..	649	20 4 6	42 4
	Foreign Forests	...	.....	....	.	.....	..	..	....	..	.....	..	. ..	....	. ...	...	0 6 0	.....	.....	..	..	..	.....	.....
	Private "	898	21,426	....	.	.....	34	77	..	..	.....	..	...	111,150	.....	6	.....	448,265	.....	..	..	6	.. ..	.....
	Total Syaltek	1,596	45,279	2,627 8	62	92 4	149	266	18 11 6	138	8 10	2	12 8	157,950	127 0	694	43 6 6	460,890	31 9	..	..	655	20 4 6	42 4

Appendix XIV.—(*Continued*).

Statement showing the increase and decrease in Forest Produce from the Government, Foreign, and Private Forests in the Cachar Division during 1887-88, as compared with 1886-87.

Description of forest produce.	Government forests.								Foreign forests.								Private forests.			
	1886-87.			1887-88.					1886-87.			1887-88.								
	Royalty paid.	Royalty outstanding.	Total.	Royalty paid.	Royalty outstanding.	Total.	Increase.	Decrease.	Royalty paid.	Royalty outstanding.	Total.	Royalty paid.	Royalty outstanding.	Total.	Increase.	Decrease.	1886-87	1887-88.	Increase.	Decrease.
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
Logs	9,431	674	10,105	6,980	1,772	8,752	.....	1,353	160	133	293	2,467	546	3,013	2,720	...	9,196	7,374	.....	1,822
Agor	119	...	119	209	.....	209	90	.....	.....	...	.....	.....	...	.....	...	...	.....	.....	.....	.....
Poles	603	40	643	279	64	343	.....	300	40	...	40	44	66	110	70	...	8	.....	.....	8
Posts and planks ...	166	...	166	375	110	485	319	.....	20	18	38	57	18	75	37	...	514	870	356	.....
Bamboos	6,99,997	31,662	7,31,659	5,94,475	43,537	6,38,012	.....	93,647	2,80,937	2,800	2,83,737	2,44,650	2,275	2,46,925	...	36,812	1,88,420	3,01,296	1,12,876	.....
Canes	24,005	128	24,133	17,275	204	17,479	.....	6,654	1,805	...	1,805	979	...	979	...	826	10,796	6,998	.....	3,798
Sun grass and reeds ...	7,300	...	7,300	5,500	.....	5,500	.....	1,800	.....	...	.....	.....	...	.....	...	...	14,22,000	16,40,044	2,18,044	.....
Firewood	2,831	160	2,991	3,572	613	4,185	1,194	.....	.....	...	.....	.....	...	.....	...	...	13,830	14,363	533	.....
Charcoal	.....	...	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	...	.....	...	...	1,141	1,190	49	.....
Dugouts	88	2	90	22	3	25	...	65	1	...	1	1	...	1	...	...	3	4	1	.....

Forest produce passed at Patharkandi, Kanairghat, South Sylhet and Habiganj during each month 1887-88.

Months.	Patharkandi.										Kanairghat.										South Sylhet.										Habiganj.									
	Logs.	Agar	Posts and planks	Bamboos.	Canes.	Sun-grass and reeds.	Chamla.	Firewood.	Dugouts	Amount realised.	Logs.	Agar.	Posts and planks.	Bamboos.	Canes.	Sun-grass and reeds.	Chamla.	Firewood.	Dugouts.	Amount realised.	Logs	Agar	Posts and planks.	Bamboos.	Canes.	Sun-grass and reeds.	Chamla.	Firewood.	Dugouts.	Amount realised.	Logs	Agar.	Posts and planks.	Bamboos.	Canes	Sun-grass and reeds.	Chamla.	Firewood.	Dugouts.	Amount realised.
										Rs. As. P.										Rs. As. P.										Rs. As. P.										Rs. As. P.
April 1887	21			6,300	28	100	15	..	..	70 8 0	..	..	..	8,567	19	1,800	..	..	..	23 7 6	..	..	..	..	..	..	..	..	..	.....	..	..	..	..	..	..	..	..	..	.....
May "	66			6,200	48	.....	1	..	..	128 15 0	14	..	..	4,500	120	..	..	..	..	59 8 0	..	..	..	..	..	..	..	..	..	.....	..	..	..	..	..	..	..	..	..	.....
June "	78			4,900	24	19,400	2	32	..	776 [illegible] 0	13	..	..	..	..	..	..	..	..	21 3 0	8	..	..	..	..	..	..	..	..	12 9 0	..	..	..	14,000	..	..	..	..	..	37 8 0
July "	80			28,950	571	14,313	2	8		728 6 6	25	..	..	..	..	..	..	..	3	73 14 3	..	..	..	..	..	..	..	..	..	.....	1	..	..	100	..	..	..	..	..	0 10 0
August 1887	39			51,950	1,540	3,971	5	10	..	322 7 6	46	..	..	8,900	..	275	..	2,136	2	220 13 3	..	..	..	..	..	..	..	..	..	.....	..	..	..	..	2	21	..	1,416	..	44 14 3
September 1887	100	..	1	82,200	1,623	[illegible]	18	88	..	944 2 0	..	..	..	..	..	..	..	..	..	.....	..	..	..	2,275	..	..	..	..	..	8 8 0	..	..	..	..	..	..	..	..	..	.....
October "	484	..	2	332,850	992	[illegible]	138	118	..	1,464 4 9	37	..	8	3,800	52	6,628	..	2,084	2	192 7 3	..	..	..	..	..	..	..	..	..	.....	..	..	..	900	..	..	..	..	..	2 4 0
November "	93	..	..	38,825	109	1,922	109	31	..	381 6 0	4	..	..	..	..	..	..	30	..	20 8 3	..	..	..	..	..	..	..	..	..	.....	..	..	..	13,800	..	..	..	..	..	24 8 0
December "	34	..	..	12,600	297	842	..	1,351	..	212 2 6	117	..	..	..	37	6,669	..	288	..	314 8 0	..	..	..	..	..	..	..	..	..	.....	..	..	..	10,000	..	..	..	..	..	25 0 0
January 1888	57	..	..	3,600	..	12,300	32	32	..	760 14 6	..	..	..	..	..	..	..	..	..	.....	..	..	..	..	..	..	..	..	..	.....	..	..	..	1,200	..	20,200	..	..	..	53 8 0
February "	141	..	4	9,400	390	41,175	50	128	..	333 7 0	260	..	14	..	5	57	..	..	5	507 3 6	..	..	..	..	..	..	..	..	..	.....	..	..	..	..	..	..	..	..	..	.....
March "	96	..	14	19,550	25	108,014	96	82	..	563 5 0	34	..	6	7,313	30	4	..	2,394	1	149 6 0	..	..	..	..	12	1,200	..	..	..	2 12 0	..	..	..	..	..	..	10	..	..	5 0 0
Total	1,282	..	21	638,325	5,833	240,654	518	1,879	..	6,756 1 9	550	..	32	33,160	263	14,963	..	7,132	13	1,081 15 6	8	..	..	3,275	12	1,200	..	..	..	24 8 0	1	..	..	41,000	2	20,411	10	1,416	..	202 4 6

Appendix No. XIV.—(*Concluded.*)

Statement showing the Forest Produce removed from the Government, Foreign and Private Forests in the Sylhet Division in 1887-88.

Revenue station.	Locality	Logs.			Agar.		Posts and planks.			Dugouts.			Bamboos.		Canes.		Sun-grass and reeds.		Firewood		Chamia in number	Amount.
		Number.	Cubic feet.	Amount.	Number.	Amount.	Number	Cubic feet.	Amount.	Number.	Cubic feet.	Amount.	Number.	Amount	Number.	Amount.	Cubic feet.	Amount.	Number of maunds.	Amount.		
				Rs. As. P.		Rs. As. P.			Rs. As. P.			Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.
Pathariyakandi.	Government—																					
	Reserved	881	19,909	2,741 12 0	556	180 0 0	11	79	22 15 6	..	..	.....	255,025	637 9 0	2,330	148 12 0	146,855	287 1 6	1,632	51 0 0	395	49 6 0
	Protected	401	8,760	1,112 8 0	..	.....	10	115	11 0 3	.	..	.....	383,300	958 4 0	3,455	215 15 0	93,799	316 13 0	247	7 11 6	123	15 6 0
	Total	1,282	28,069	3,854 4 0	556	180 0 0	21	194	33 15 9	..	..	.....	638,325	1,595 13 0	5,835	364 11 0	240,654	603 14 6	1,879	58 11 6	518	64 12 0
	Foreign	801	22,515	.....	43	.....	.	..	.....	.	..	.....	346,787	.....	2,406	.....	. . ..	....	26	.....	.	.....
	Private	297	5,433	.....	.	.....	247	..	.. ..	.	..	.....	1,508,522	..... .	993	....	77,976	.....	104	.....	.	.....
	Total	1,098	27,948	.....	43	....	247	.	.....	.	.	.....	1,855,309	..... .	2,399	.....	77,975	.....	124	.....	..	.....
Kanairghat.	Unclassed State forests and waste lands	550	18,366	1,220 1 6	..	..... .	28	75	5 13 9	13	168	16 2 9	33,100	82 12 0	263	16 7 0	14,943	17 12 3	7,132	222 14 3	..	.....
	Foreign	.		.... .	..	.....	..	..	.....	..	..	.....	...	....	....	....	..	.....	.. .	.....	.	. ....
	Private	70	1,515	.....	..	.....	..	..	.....	..	.	.. .	6,600	.. . ...	....	. .....	34,770	.....	. ..	.....	..	. ....
	Total	620	19,881	1,220 1 6	..	.....	28	75	5 13 9	13	168	16 2 9	39,700	82 12 0	263	16 7 0	49,713	17 12 3	7,132	222 14 2	.	.....
South Sylhet.	Unclassed State forests and waste lands	8	201	12 9 0	..	.....	..	..	.....	..	..	.....	3 275	8 3 0	12	0 12 0	1,300	1,121 8 0	..	.....	.	.....
	Foreign	4,249	4,370	.....	..	.....	.	..	.....	..	..	.....	1 019 963	.....	4,407	.....	456 291	..... .	....	.....	.	.....
	Private	408	492	.....	..	.....	13	..	.. ...	..	..	.....	1,017,137	.....	. .	.. ..	360,120	.....	....	.....	..	.....
	Total	4,665	5,063	12 9 0	..	.....	180	..	.....	.	..	.....	2,040,375	8 3 0	4,419	0 12 0	766,614	1 121 8 0	....	.. .. ..	..	.... .
Haldgaon.	Government protected forests	1	6	0 6 0	..	.....	..	..	.....	..	..	.....	41 090	102 8 0	2	0 2 0	20 412	338 0 0	1 416	44 4 0	40	5 0 0
	Foreign	4,658	23,837	.....	..	.....	..	..	.....	..	..	.....	1,531 290	.....	2,024	.. . ..	5,061	.....	1 608	.. ..	..	.....
	Private	....	. .	.....	..	.....	26	..	.....	..	..	.....	1,100	.....	. ..	..... .	9,740	.....	2,402	.....	..	.....
	Total	4,854	23,843	0 6 0	..	.....	26	..	.....	..	.	.....	1,573,390	102 8 0	2,026	0 2 0	35,213	338 0 0	5,426	44 4 0	40	5 0 0
	Grand Total	12,519	104,804	5,087 4 6	599	180 0 0	452	269	39 13 6	13	168	16 2 9	6,147,099	1,789 4 0	15,942	382 0 0	1,170,189	2,081 2 9	31,561	325 13 9	558	69 12 0

APPENDIX XV.—*Statement showing the Forest Produce exported viâ Diyangmukh and registered at that Station during each month of the year 1887-88.*

Months	Dugouts.		Posts.		Oars.		Planks.		Bamboos.		Chariahs.		Rice-pounders.		Total.	
	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.	Quantity.	Estimated value.
		Rs. A		Rs A.		Rs. A		Rs. A		Rs. A.		Rs. A.		Rs. A.		Rs. A.
April 1887	12	339 0	4	2 8	...	...	...	...	...	...	...	...	...	...	16	341 8
May "	3	46 0	...	...	...	...	...	...	...	...	..	...	...	...	3	46 0
June "	8	128 8	44	46 15	32	24 0	...	...	...	...	...	...	...	...	84	199 7
July "	38	1,302 0	20	50 0	...	...	...	...	...	...	...	...	...	...	58	1,352 0
August 1887	26	936 0	80	54 8	24	24 0	...	...	500	10 0	...	...	...	...	630	1,024 8
September 1887	4	178 8	19	11 0	1	0 12	...	...	425	4 4	...	...	...	...	449	194 8
October "	14	599 8	56	89 15	10	6 3	...	...	400	8 0	...	...	...	...	480	703 10
November "	5	126 0	61	76 0	...	...	...	...	100	1 0	...	...	...	...	166	203 0
December "	1	25 0	...	...	...	...	...	...	...	...	...	...	...	...	1	25 0
January 1888	2	16 0	...	...	...	...	...	...	...	...	...	...	...	...	2	16 0
February "	12	382 12	...	...	...	...	...	...	...	...	...	...	...	...	12	382 12
March "	2	24 0	6	14 0	...	...	...	...	...	...	...	...	...	...	8	38 0
Total	127	4,103 4	290	344 14	67	54 15	...	...	1,425	23 4	...	...	...	...	1 909	4,526 5

APPENDIX XVI.—*Statement of Forest Revenue realised by the Forest and Revenue Departments, Assam.*

1	2		3		4		5		6		7		8		9		10		11		12		13	
Division.	Royalty on forest produce.		Garkati.		Revenue from forests not managed by Government.		Miscellaneous.		Revenue realised by mauzadárs		Total revenue realised by the Forest Department.		Revenue realised by tahsildárs.		Value of timber on land taken up for cultivation.		Rubber.		Cane and cassia mahál.		Lac mahál.		Total revenue realised by the Revenue Department.	
	1886-87.	1887-88	1886-87.	1887-88.	1886-87.	1887-88.	1886-87.	1887-88	1886-87.	1887-88.	1886 87.	1887-88.	1886-87.	1887-88.	1886 87.	1887 88.	1886 87.	1887-88.	1886-87.	1887-98.	1886-87.	1887-88.	1886-87.	1887-88.
	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.
Direction	.....	.....	...	...	...	...	33	3	...	...	33	3	...	...	.....	.....	...	...	...	...	...	...		.....
Working Plans	.....	.....	...	...	...	...	...	1,212	...	...	.....	1,212	...	...	.....	.....	...	...	...	...	...	...	.....	.....
Gáro Hills	7,893	12,995	7,264	7,859	587	718	507	975	504	1,105	16,755	23,652	...	...	.....	.....	...	...	...	...	...	...	... ..	.....
Goálpára	16,657	36,818	...	...	113	752	996	920	674	1,347	18,440	39,837	...	...	.....	.....	...	...	9	15	...	...	9	15
Kámrúp	27,442	40,741	...	...	7,375	3,220	1,847	1,702	55	100	36,719	45,763	242	289	.....	.....	...	300	...	...	...	...	242	589
Darrang	1,840	2,954	...	...	...	...	163	623	2,237	2,641	4,240	6,218	73	167	2,837	2,089	22,100	21,005	...	...	...	25	25,010	23,286
Nowgong	2,215	5,438	...	...	...	...	...	1 037	3,006	1,982	5,221	8,457	...	...	.....	.....	88	161	...	.	199	...	287	161
Sibságar	6,402	7,586	...	...	...	...	028	632	789	837	8,219	9,055	...	...	548	2,273	...	...	...	270	21	89	569	2,632
Lakhimpur	5,995	9,096	...	...	...	...	660	1,115	6,870	7,254	13,525	17,465	...	...	1,459	1,184	12,267	10,600	...	...	12	...	13 738	11,784
Cachar	36,193	26,678	...	...	1,404	7,168	4,068	3,371	...	...	41,665	37,217	862	56	1,402	1,860	500	275	...	...	...	...	2,764	2,191
Sylhet	18,699	20,208	...	...	...	3,076	29	17	...	...	18,728	23,301	...	...	834	12,567	250	250	...	...	...	...	1,084	12,817
Khási and Jaintia Hills	3,200	15	...	...	1,024	870	64	148	...	...	4,288	1,033	...	...	.....	.....	350	500	125	123	...	...	475	623
Total	126,536	162,529	7,264	7,859	10,503	15,804	9,395	11,755	14,135	15,286	1,67,833	213,213	1,177	512	7,080	19,973	35,555	33,091	134	408	232	114	44,178	54,098

Resolution on the Assam Forest Report for 1887-88.

Extract from the Proceedings of the Chief Commissioner of Assam in the Revenue Department, No. 2,672, dated the 12th September 1888.

READ—

The Report on Forest Administration in Assam during 1887-88.

RESOLUTION.

THIS report bears date the 30th June, and was received in print on the 9th August. The Chief Commissioner regrets that press of work, coupled with his absence on tour in the Surma Valley, have rendered it impossible for him to place his review in the hands of the Government of India at an earlier date. The delay, however, could not be avoided. Mr. Manh was in charge of the department throughout the year, with the exception of 2 months and 28 days, during which Mr. Jellicoe officiated for him.

General.

2. The general results summarised in the introductory portion of the report show that the work of the year has on the whole been eminently successful and satisfactory, and that the Forest Department may be congratulated on having secured the best balance that has been shown for some years. Being new to the Province, the Chief Commissioner does not feel competent to review the report as it deserves, and his observations will therefore for the most part be confined to certain points to which particular interest or importance appears to attach and to matters a correct understanding of which seems to demand further information than that afforded in the report.

Reserved forests

3. Excluding the area deducted on account of re-surveys, the area of reserved forests increased from 1,732,528 acres, or 2,707 square miles, at the commencement of the year to 2,118,207 acres, or 3,310 square miles, at its close. The addition actually effected to the reserved area during the year was, therefore, 385,679 acres, or 603 square miles, and the reserved area itself represented a percentage of 7·3 on the total area of the Province, as compared with 6·2 at the close of the previous year.

Protected and unclassed forests

4. No addition was made during the year to the protected forests; but in the Lakhimpur district 280 square miles of protected forests have been gazetted as reserves, and 7 square miles of protected forests throughout the Province were given up for permanent cultivation. Similarly, the area of unclassed State forests and waste lands was reduced by 341 square miles, 334 square miles having been gazetted as reserved forests and 7 square miles having been given up for permanent cultivation. The authority for the figures given in paragraph 15, which show the total area of each district in square miles, should be stated, as these figures do not in all cases correspond with those on record in this office.

Boundary work.

5. In paragraph 22 of the report the Conservator notices the boundary work performed, and observes that the number of boundary-marks kept up (4,817, as compared with 5,113 in 1886-87) shows "a decrease of 296, effected for economy's sake." This, however, does not appear to be an accurate description of the change, inasmuch as the reduction of boundary-pillars was far larger than that represented. In fact, the number reduced in the Lakhimpur division alone was more than double the number stated for the whole Province, but the reductions in some places were to a certain extent counterbalanced by increases in others. Moreover, the diminution in the number of boundary-marks is partly due to a reduction in the length of boundary demarcated. The substitution of natural for artificial boundaries which has been effected in some cases appears to the Chief Commissioner to be a move in the right direction, and should be carried out wherever possible.

From paragraphs 29, 31, and 39 of the report it is noticed that a practice exists in some forest divisions of getting the clearing of boundary-lines and the repairing of boundary-marks done by villagers living in the neighbourhood in return for privileges granted to them; a similar method is said in paragraph 98 of the report to have been adopted for the purposes of clearing fire-lines, in one instance the privilege granted to the villagers being permission to remove dead-wood for house posts and fuel and drift-wood from an adjoining river. The Chief Commissioner would commend this arrangement to the notice of all forest officers as being both economical and convenient.

With reference to this portion of the report generally, Mr. Fitzpatrick would observe that it seems unnecessary to repeat in the body of the report details which can be seen at a glance from Appendix II. In future, the columns showing "chains" should be omitted from this Appendix, and in the space thus gained the cost and rate of the work should be inserted. This change will admit of the comparative cost of the work being more clearly seen, while it will enable the Conservator to confine himself in the report itself to such explanations as may seem necessary of the figures given in the Appendix, and to any other observations which he may desire to make. If, in addition to this, columns 6, 10, and 13, which seem quite superfluous, were omitted from Appendix II., a great deal of the information given in the body of the report under the head of boundary work could be thrown into a column of remarks, where it would be far more convenient for purposes of reference.

Privileges in reserved forest

6. In paragraph 2 of the orders* on the report for the year 1886-87, the Government of India suggested that when temporary privileges are granted in reserved forests, it might be desirable to fix a limit to the period during which they are to be conceded. This suggestion has been adopted, the maximum period fixed being ten years If the Inspector-General should desire to re-open this matter during his approaching visit to Assam, he will doubtless do so

Surveys and working plans.

7. Mr. Fitzpatrick will not, on the present occasion, attempt to criticise the expenditure on surveys and working plans, as he has not yet had before him any portion of the work of the division in which this expenditure is mainly incurred, and as he does not wish to delay this review in order to make detailed enquiries. He is well aware of the peculiar difficulties which attend the execution of work of this description in Assam, especially in the hill districts. At the same time it must be admitted that, as observed* by the Government of India in connection with last year's report, the cost is high, and Mr. Fitzpatrick would wish the Conservator in future to submit to him, before the commencement of each working season, a programme of the survey and working plans business for that season, together with a rough estimate of its cost and a statement of the reasons which render it desirable to take the work in hand. The Chief Commissioner is fully convinced of the high importance of such work; but the particular period at which it should be undertaken must, it appears to him, depend on the nearness of the time when it is likely to be turned to account either in the disposal of the timber or in the undertaking of operations for the improvement of the forest concerned. For instance, if a prospect existed of a particular forest remaining for a long period in the position in which Mr. Fitzpatrick understands from Mr. Mann that the Dambu forest at this moment is, *viz.*, that the demand on it is confined to trees over five feet in girth, and that all such trees can be safely cut out without detriment to the forest, it would seem premature to saddle an exhausted exchequer with the cost of elaborate surveys and working plans.

* Paragraphs 3 and 4 of Revenue and Agricultural Department letter No 1 026F, dated the 27th October 1887

Under the circumstances above described, Mr. Fitzpatrick has no further remarks to make on this portion of the report beyond observing that some of the particulars given, *e.g.*, those in paragraphs 62 to 65, do not seem to be of sufficient importance to justify their inclusion in the report.

Forest offences

8. There were 140 prosecutions for breach of forest rules against 113 in the previous year. Of these, the large majority (112) related to the unauthorised felling or appropriation of wood and minor forest produce. The number of persons concerned in the 137 cases disposed of during the year was 328, of whom 237 were convicted and 91, or nearly 28 per cent., were acquitted. In the year 1886-87 the proportion of acquittals was 22 per cent. The increase in the number of prosecutions is not greater than might be ascribed to the natural development of the system, but it must be admitted that the results were on the whole somewhat less satisfactory than in the previous year, nor is this to be accounted for by the fact (assuming it to be a fact) put forward by the Conservator, that nearly all magistrates are disposed to deal very leniently with forest offences. Such a disposition might lead magistrates to inflict inadequate punishments, but would scarcely induce them to acquit offenders.

The figures for cases compounded during the past two years under Section 67 of the Forest Act, are—

	Number of cases.	Number of persons.	Amount. Rs. As.
1886-87	50	100	1,373 12
1887-88	193	181	6,308 9

* Letter from Revenue and Agricultural Department No 1 026F., dated the 27th October 1887.

There has thus been a most striking increase in the number of forest charges compounded during the year under review, and this increase is especially marked in charges against single individuals so compounded. The Chief Commissioner has always been a supporter of the composition system, but it is obviously a system which needs to be most carefully watched, as Mr. Fitzpatrick trusts that it is watched in Assam.

Fire protection

9. Although the season was an exceptionally dry one, the history of fire protection during the year on the whole exhibits satisfactory results, the area which it was attempted to protect and which was actually protected having increased in the former case from 178,088 acres in the previous year to 191,887 acres, and in the latter from 176,017 to 187,959 acres. On the other hand, the expenditure on this account decreased by Rs. 1,929 (from Rs. 9,486 to Rs. 7,557). An exception to the generally successful management was in the Darrang division, where the failure seems (paragraph 106 of the report) to have been due to a neglect of duty on the part of Mr. Jellicoe. The Chief Commissioner hears with much regret that this is not the first occasion on which Mr. Jellicoe's indifference to this important duty has attracted attention. Mr. Fitzpatrick trusts that, as funds become available, measures will be taken to extend protective measures further over the large but valuable forest area which still remains unprotected in the Gáro Hills.

Natural and artificial reproduction

10. As regards reproduction, the Chief Commissioner agrees with the Conservator in thinking that, especially in the present state of our finances, it will be best to restrict ourselves chiefly to the careful protection of the growing stock, which for some generations to come will be sufficient to meet all demands, and not to attempt artificial reproduction on any large scale. In paragraph 7 of the orders on last year's report, the Government of India suggested the desirability of trying the effect of improvement cuttings with a view to facilitate the regeneration of the more valuable kinds of trees by the removal of inferior species. In order to give effect to this suggestion, the Conservator has, since the close of the year under report, directed the experiment to be tried in the Cachar and Sylhet Divisions, free permits or permits at reduced rates being given for the purpose, and the cutting being carried on under the supervision of subordinate officers of the Forest Department. In the Assam Valley the Conservator reports that the demand for the inferior kinds of timber and of firewood is as yet so small and the value so low that wood-cutters would probably not be found willing to make such clearances without special payment. Mr. Mann has, however, called for reports on the subject, and the Chief Commissioner will await the result of these enquiries before deciding what action (if any) should be taken in the matter.

Road work and buildings

11. The account of road work and buildings according to forest divisions appears to the Chief Commissioner to be given in paragraphs 151-169 of the report with an amount of detail which is altogether unnecessary. This portion of the report should be considerably curtailed in future.

Yield of forests

12. The increase in the demand on the forests of the Assam Valley and the Hill districts for *sál* from 188,361 cubic feet in 1886-87 to 333,638 cubic feet in the year 1887-88 shown by the table in paragraph 185, is the most important feature of the report. Its importance is the greater, inasmuch as the improvement of the trade would seem to be continuous, the figures being as follows:—

	Cubic feet.
1884-85	107,190
1885-86	99,322
1886-87	188,361
1887-88	333,638

There would thus seem to be ground to hope that the causes at work are of a permanent nature, and it is to be regretted that we are not told more about them in the report.

The statement in paragraph 188 that "the large increase in the outturn of second-class timber (*i.e.*, the increase shown in the table in paragraph 185) is due to the more extended manufacture of tea-boxes in the Province, instead of their importation which prevailed formerly," is incorrect. The outturn of second-class timber, as shown in the table, has risen from 367,343 cubic feet to 1,021,674 cubic feet, and if the increase of 654,331 cubic feet were in reality due to an increase in the demand for wood for tea-boxes, the matter would indeed be one for congratulation; but, as might be anticipated, this is too good to be true. The fact is that the second-class timber shown in these statements includes the second-class timber granted under the free home consumption permits issued of late to the ryots, and,

as will presently be explained, there is reason to suspect that increases in the amount of timber for which such permits are issued are in the main merely nominal, representing a greater strictness in working the system rather than an increase in the quantity of timber taken by the ryots.

Mr. Mann has now, at the Chief Commissioner's request, furnished a statement for the years 1886-87 and 1887-88, excluding the timber for which such permits were issued, and the result is that the second-class timber taken in the two years stands as follows:—

					Cubic feet
1886-87	...	...	...	...	162,728
1887-88	...	...	...	...	229,109
			Increase...	...	66,381

This alone is the increase in the quantity of timber taken in the way of trade, but it is still an increase on which we may well congratulate ourselves.

What proportion of it is taken for the manufacture of tea-boxes does not appear from the report, and any information on this point would be most acceptable. One of the first things that struck Mr. Fitzpatrick when he began his tour last cold weather was the extent to which tea-boxes are still imported from Burma and elsewhere. In some tea factories he was told that there was a difficulty about establishing saw-mills. In one of the largest concerns in the Province, where such a difficulty could scarcely be felt, it was said that if the Burma teak-boxes cost more, on the other hand, the tea put up in them sold in England for something more, as there was a demand there for the boxes when emptied. Other reasons were given elsewhere; but it is clear that the whole question needs thorough looking into, and that all important details connected with the extension of saw-mills and the increase of the demand by them for various sorts of wood should find a place in the Forest Report.

The outturn of timber from the Cachar and Sylhet forests (paragraph 187) has been not "slightly," as stated in paragraph 189 of the report, but considerably, less in the year under report than in the previous year. In logs and boats there has (see the table in paragraph 187) been a falling off from 417,818 (cubic feet are apparently meant) to 308,788, or by upwards of 25 per cent. This is stated to be due to the exceptional activity in the timber trade the year before. Now, that there was a remarkably increased activity the year before is undoubted; but it remains to be explained why, if this was the cause, the outturn from private forests in 1887-88 did not fall off too, and why the imports of logs and boats from foreign territory appear as considerably more than double, rising from 56,205 in 1886-87 to 129,191 in 1887-88.

It is said that "the increase in the outturn of foreign forests has mainly taken place in the imports into Cachar from Manipur, which is attributed by the Divisional Officer to the re-established tranquillity in that country." How far any increase there was in the imports from Manipur is rightly attributed to political causes the Chief Commissioner cannot at this moment to stop enquire: but that Manipur would account only for a small portion of the increase in logs and boats above referred to would appear from paragraphs 213 and 214, where the increase in logs (boats are not mentioned) from Manipur and the Lushai Hills is shown as only 2,284 (pieces apparently, not cubic feet) and that from Hill Tipperah as 7,927.

Mr. Mann, to whose notice the Chief Commissioner has brought these figures, thinks that the large increase from Hill Tipperah may be due to differences in connection with registration, but it is clear that the whole matter of the falling off in the demand on our forests in the Surma Valley this year, accompanied by a steady continuance of the demand on private forests, and so large an increase, or apparent increase, in imports from foreign territory requires to be carefully looked into.

In short, the Chief Commissioner would wish the important subject of the timber trade to be dealt with in future reports in a more careful and comprehensive manner. Next to the paramount object of conserving our forests for future generations comes that of working them as profitably as possible for the benefit of the present generation; and the peculiarity of this Province, where the exuberance of nature exceeds even the wastefulness of man, is that the latter object is in most parts by far the more difficult of the two to secure. The difficulty which would, even under other circumstances, be great, is enhanced by the fact that, owing to the position the ryots have established in relation to the forests, we are deprived of the most important market for our forest produce. Whatever pains we may take to render it clear that the concessions we now make to the ryots are revocable at pleasure, we cannot hope, at least in the present generation, to make them pay for what they have so long been accustomed to take almost as freely

as the air they breathe or the water they drink. We shall be practically compelled, for a long time to come, to let them have free of charge the minimum of the less valuable sorts of forest produce needed for their every-day requirements; and while they continue their present simple mode of life, they will seek for little more. Looking above the ryots, we find few agriculturists of the superior class, and our towns are small and inhabited by a population far from wealthy.

We shall have accordingly to depend for our income to a great extent on the exporters of timber and on such of the planters as have not, owing to the extraordinarily large areas granted at an earlier period of the administration, already got sufficient forest to supply their wants. Hence it follows that we must carefully attend to every turn of the timber trade and to every chance that may present itself for pushing the sale of our timber with the plantes. If our forests were in the hands of a private proprietor, he would make such matters his special study, and we must do the same. The Chief Commissioner is well aware that, though the matter is not referred to in this report, Mr. Mann has been anxiously exerting himself, and, as the result has proved, with success, to get a market for the *sâl* from the Dambu forest; and it may be that in some other parts of the Province as well, if specially favourable terms were offered, as they were in the Dambu forest, to large dealers, we might extend our business. It might further, for example, be worth considering whether specially favourable terms should not be offered to saw-mills taking a large quantity. We cannot, it is to be feared, hope to do much in this way; but still we should spare no pains to do what we can. Anything is better than to leave large numbers of mature trees to rot in our forests.

Free grants of forest produce

13. On the whole, the quantity of forest produce for which free grants were issued has more than doubled as compared with the previous year; but the rate of increase in different districts, shown in paragraph 210 of the report, and Nos. 54 and 55 of the tabular statements appended, differs in the most surprising manner, and in one district (Lakhimpur) the value of such produce has not risen, but has fallen to nearly one-fourth of what it was last year. Full explanations on this point should be called for by the Conservator, and submitted for the orders of the Chief Commissioner; but Mr. Fitzpatrick cannot help suspecting that the fact is that, since the introduction of the permit system, the people continue to do what they did before that system was instituted, that is, to take what produce they want, whether they have a permit or not, and that the number of permits issued depends chiefly on the extent to which the requirement of a permit is insisted on by the officers concerned. The question of free-grants generally will be further considered by the Chief Commissioner on receipt of the explanations now called for.

Financial results

14. The total receipts and expenditure of the year are compared below with those of 1886-87:—

		1886-87.	1887-88.	Increase or decrease.
		Rs.	Rs.	Rs.
	Receipts.			
I.	Departmental timber operations	386	1,974	+1,588
II.	Produce removed by consumers and purchasers	1,83,060	2,26,495	+43,435
III.	Drift and waif wood	2,225	1,798	—427
IV.	Forests not managed by Government ...	10,628	13,336	+2,708
V.	Miscellaneous.....	15,711	23,708	+7,997
	Total	2,12,010	2,67,311	+55,301
	Expenditure.			
	A.—Conservancy and Works.			
I.	Departmental timber operations	2,686	4,227	+1,541
II.	Produce removed by purchasers	6,104	8,453	+2,349
III.	Drift and waif wood	79	114	+35
VI.	Live stock, tools and plant	12,940	14,658	+1,718
VII.	Roads and buildings	11,780	9,907	—1,873
VIII.	Demarcation, surveys, working plans, plantations, fire-protection, and other works.....	40,291	35,871	—4,420
IX.	Miscellaneous.....	5,287	12,775	+7,488
	Total A.....	79,167	86,005	+6,838

		1886-87.	1887-88.	Increase or decrease.
		Rs.	Rs.	Rs.
	B.—Establishments.			
I.	Salaries	1,06,124	1,13,809	+7,685
II.	Travelling allowance	22,697	22,446	— 251
III.	Contingencies	4,298	4,631	+ 333
	Total B	1,33,119	1,40,886	+7,767
	Grand Total A and B	2,12,286	2,26,891	+14,605
	Deficit	—276	.....	+40,696
	Surplus	.....	40,420	

The Chief Commissioner does not propose on the present occasion to offer any comments on the above figures beyond calling attention to the fact that the surplus (Rs. 40,420) is the best attained since the year 1882-83, and remarking that he fully concurs in the opinion expressed by his predecessor, that in the Assam Valley the forest income requires careful and assiduous management to enable the department to pay its way. Mr. Fitzpatrick trusts that the Conservator will continue to exercise a close supervision over the expenditure of the department, and that he will steadily resist any applications, whether for additional subordinate establishments or under other heads, which involve additional expenditure, unless they are shown to be clearly justified by the requirements of the case and the necessities of the department.

15. In conclusion, the Chief Commissioner desires to express his acknowledgments to Mr. Mann for his energetic and efficient management of the Forest Department in this as in previous years.

By order of the Chief Commissioner of Assam,

F. C DAUKES,

Offg. Secretary to the Chief Commissioner of Assam.

A. S. Press (R. & P.) No. 80—500—13-9-88.

No. 98 F., dated Calcutta, the 30th January 1889.

From—SIR E. C. BUCK, *Secretary to the Government of India,*

To—*The Chief Commissioner of Assam.*

I am directed to acknowledge the receipt of your letter, No. 2693, dated the 14th September last, forwarding the Progress Report of Forest Administration in Assam for the year 1887-88, together with your Resolution thereon.

2. It is observed that still greater progress was made, during the year under notice, in the final reservation of the Government forest estates than had been effected in the previous year, and that 614 square miles have been transformed into Reserves under the Indian Forest Act. The changes which took place during the year, and the present constitution of the Government forest estates in Assam, may be gathered from the following table:—

Class of Forests	At the commencement of the year	Added	Excluded.	At the close of the year.	Proportion of Forests to whole area of Province (44,838 square miles).
	Sq. Ms.	Sq Ms.	Sq. Ms.	Sq Ms	Per cent.
Reserved	2,707	614	11	3,310	7
Protected	1,225	...	287	938	2
Unclassed State, and Waste Lands	6,126	11	340	5,797	13
TOTAL .	10,058	625	638	10,045	22

3. The Government of India is glad to notice that the suggestion made by it to fix a limit of time during which temporary privileges granted in Reserved Forests may be enjoyed, has been adopted by you; thus obviating the possibility of the future management of the Reserved Forest estates being compromised by the exercise of a degree of liberality which may, under present conditions, be deemed excusable. At the same time it would seem advisable that privileges within Reserved Forests should be granted only in exceptional cases. No doubt Forest Administration in Assam is at present, and will probably for a long time be, to a great extent dependent on an export trade; but it may be foreseen that the creation of a local demand is only a question of the general development of the Province by improved means of communication and the extension of agriculture, which may be rapid or slow, but must ultimately come to pass. To allow, however, of the gradual and healthy establishment of a local market, it is imperatively necessary to draw from the outset, whilst exercising a great liberality outside the area which it encloses, a fixed barrier, not merely against the alienation of forest lands considered necessary for permanent reservation, but against the absorption of the profits derivable therefrom.

It is observed that privileges have been granted year by year as remuneration for the performance of specific services, such as the clearing of boundary and fire lines, the cutting of creepers, &c.; and so long as such privileges are kept within the value of the work performed, the system approved of by you commends itself also to the Government of India.

4. The demarcation of the forest estates under the control of the Forest Department has apparently received the attention which it deserves; but the facts are reported in unnecessary detail. It is of course necessary for the Conservator

to keep up Appendix II, so as to be informed of the detailed progress in each Division, and to be able to direct the Divisional Officer's attention to boundaries not cleared or inspected in the previous year; but for the purposes of an Annual Report, totals by Divisions would be sufficient. The alterations in the return, as ordered by you, are decided improvements, as tending to shorten the Report—an aim which is always desirable.

5. The Government of India has noticed, with satisfaction, your order requiring the Conservator to submit in future years a programme of the surveys he intends undertaking during the next working season, together with an estimate of the cost, and offers the services of the Forest Survey Branch for the scrutiny of such programme and estimate.

The Government of India, though it cannot, in the absence of more information, accept the view that all trees above 5 feet in girth can be cut out of the Dambu or any other forest without detriment, entirely agrees with you that it is premature to prepare elaborate Working-Plans, based on expensive valuations of the growing stock, for forests the potential capability of which, as regards either the whole *peuplement* or any particular species, is far beyond the demand made on them now or likely to be made in the near future. Plans based entirely on area and on broad principles of sylviculture will, it is believed, in such cases suffice for all practical purposes.

It is nevertheless a matter of importance that a Working-Plans Division has been established, and is being maintained, for the collection and record of statistical data and for the division of the forests into their natural blocks; but it seems doubtful whether it is necessary to publish the work of the Division, as shown in Appendices III to VI, in an Annual Report. In this connection I am to point out that, though there can be no doubt that the accurate record of any facts contained in those Appendices and in the Appendices which follow, is desirable in every instance and necessary in most, the data would seem to be of hardly sufficient general interest to warrant their annual publication; and I am to ask you to consider whether it would not be sufficient to give the general results in the Annual Reports, and to provide otherwise for the maintenance of the necessary records without incurring the danger of remissness in this respect.

6. The Government of India agrees with your remarks in regard to forest offences, but I am to point out that it is impossible to judge from the Conservator's Report whether the protection has, from a purely Forest point of view, been sufficiently effective or not.

7. The results of fire-protection, as compared with those of the previous year, are shown in the following table :—

Year.	Area, in square miles.			Proportion of Failures to area attempted	Cost.		Proportion of area under Fire-protection to total area of Reserves.
	Attempted.	Failures.	Protected.		Per square mile protected.	Per acre protected.	
				Per cent.	R	Pies.	Per cent.
1887-88 . . .	300	6	294	2	26	8	9
1886-87 . . .	278	3	275	1	34	10	10
Increase or decrease in 1887-88 . .	+22	+3	+19	+1	−8	−2	−1

There has been a considerable decrease in the cost per square mile, but the proportion of failures to the area attempted, though still very small, has increased. The Government of India has read with some concern that the main failure in this respect is attributed to neglect on the part of the senior Divisional Officer in the Province.

The area under fire-protection has been increased by 22 square miles, but that of Reserves has been more rapidly extended, and it is, therefore, observed with satisfaction that you contemplate a corresponding increase of the area under fire-protection—a measure which the Government of India considers of the greatest importance, in order to store up a healthy growing stock to meet the requirements of the future.

8. Your views that no attempts on a large scale should be made in regard to artificial reproduction are doubtless correct, and have been accepted by the Government of India; but the efforts to introduce the cultivation of valuable trees in *jhúmed* areas should not be entirely abandoned.

The efforts reported as having been made for improving the growing stock of the future, by the removal of inferior species, in the forests of the Cachar and Sylhet Divisions, have been noticed with interest. These are experiments in the right direction, and the results will probably warrant a certain amount of expenditure for this purpose in forests where the removal of inferior trees cannot be effected without some such measure. In cases where the cost of extraction would be prohibitive, the work may be restricted to the girdling and killing of the valueless species; and it may be mentioned that similar operations are carried out in some parts of Lower Burma with considerable success towards the improvement of the *peuplement*. Creeper-cutting seems to have been systematically proceeded with over less than 13 square miles of sâl forests.

9. The Government of India has noticed, with approval, the interest you have taken in examining the question of the local trade in forest-produce, and agrees with you that in future Reports the subject should be dealt with in a more careful and comprehensive manner. Considerable progress has been made in re-establishing the trade in sâl timber, and the financial results have been more favourable, showing a surplus of R40,420 against an annual deficit during the last three years.

10. The Government of India desires to thank you for the interest you have taken in Forest Management in Assam, and concurs in your commendation of the Conservator's services.

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